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Authors of review articles are quoted in the Author Index. BBA reviews published in the special review sections (Biomembranes and Cancer) are not included in the key-word system, but cumulative contents are to be found at the end of the Subject Index. A list of reviews published in the regular sections of BBA is also presented for the convenience of readers; such reviews are included in the key-word system.

The Editors and Publishers welcome any comments on the usefulness of this Index, together with suggestions for improvements.

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G-protein; Spontaneously hypertensive rat; (Rat vascular smooth-muscle cell) (Clark, C.J. (1136) 290)

Adenylyl imidodiphosphate
Anion binding; Magnesium ion; Phosphate; Pyridoxalphosphate-6-azophenyl-2′-sulfonic acid; Sarcoplasmic reticulum; NMR, ^{35}Cl- (Janetzky, S.T. (1105) 278)

Adhesion assay
Collagen; Matrigel; Glycoprotein VI; Glycoprotein Ia/IIa; (Human platelet) (Moroi, M. (1137) 1)

Adhesion molecule
Rat ICAM-1; cDNA (Kita, Y. (1131) 108)

Adhesion molecule-1
Nucleotide sequence; (Rat vascular cell) (Williams, A.J. (1131) 214)

LECAM-1; cDNA; (Rat) (Watanabe, T. (1131) 321)

Adipocyte
Facilitative glucose transporter; Glucose transporter; Photoaffinity labeling; Forskolin (Hellwig, B. (1111) 178)

Insulin; Glucose uptake; Diabetes; Glucose production; Insulin receptor; Skeletal muscle; (Rat) (Koopmans, S.J. (1115) 230)

Corticosteroid receptor; Hormonal regulation; (Rat) (Pedersen, S.B. (1134) 303)

Glycolysis; In situ; Regulation (McCormick, K.L. (1135) 1)

cyclic AMP phosphodiesterase; Ovariectomy; cyclic AMP metabolism; (Rat) (Lacasa, D. (1136) 99)

Adipose tissue
Lipoprotein lipase; Glycosylation; Subcutaneous; Omental; (Human) (Sakayama, K. (1127) 153)

Pregnancy; Hyperlipidemia; Docosahexaenoic acid; Fetus (Chen, Z.-Y. (1127) 263)

Adjuvant arthritis
Cytoskeleton; Synovial cell (Ramos-Ruiz, R. (1138) 184)

ADP
Phosphocreatine; Skinned smooth muscle; Muscle function; (Guinea pig) (Clark, J.F. (1100) 137)

ADP binding
ATPase, Na^+/K^+-; Isoenzyme; Heterogeneity; Ouabain binding; Stoichiometry; (Pig kidney) (Jensen, J. (1110) 81)

ADP-ribosylation
Nitrogenase regulation mutant; Manganese deficiency (Hallenbeck, P.C. (1118) 161)

Elongation factor 2; Protein synthesis; Thermostability (Raimo, G. (1132) 127)

2-azido-ADP
ATPase, F_1-; Non-catalytic site; Photolabeling (Edel, C.M. (1101) 329)

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Adrenergic
Salivary phospholipid; Secretion; Cholinergic mediation (Slomiany, B.L. (1124) 171)

Adrenergic receptor
cyclic-AMP-dependent protein kinase; Lipolysis; (Rat adipocyte) (Langin, D. (1135) 349)

α_1-Adrenergic
Protein kinase C; Cyclic AMP accumulation; (Obese Zucker rat) (García-Sáinz, J.A. (1135) 221)

α_2-Adrenergic receptor
Platelet; Insulin; Platelet aggregation; (Human) (Kahn, N.N. (1134) 292)

β-Adrenergic agonist
Calmodulin; Calmodulin binding protein; Adenylate cyclase; Synaptosomal membrane; Calmodulin kinase II (Natsukari, N. (1133) 193)

α_2-Adrenoceptor subtype
Stable transfection; Cell line; [^{3}H]Rauwolscine binding; Adenylate cyclase activity; RNAase protection assay (Marjamäki, A. (1134) 169)

Adriamycin
Mitochondrion; Carnitine; Cardiolipin; (Liver) (Battelli, D. (1117) 33)

Adriamycin-transferrin conjugate
Plasma membrane; NADH oxidase; Electron transport; Transferrin-adriamycin conjugate; Antitumor drug; (HeLa cell) (Sun, I.L. (1105) 84)

Adsorption
Surfactant-associated protein; Phospholipid; Liposome; Monolayer; Bilayer; Squeeze-out; Surface tension; Surface pressure; Respiratory distress syndrome; Calcium (Yu, S.-H. (1126) 26)

Aequorin
Cytoplasmic calcium; Calcium, cytoplasmic; Cytoplasmic pH; pH, cytoplasmic; Parotid; BCECF (Snowdowne, K.W. (1108) 145)

Aerobic growth
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Affective disorder
Lithium; Second messenger (Sillence, D.J. (1138) 46)

Affinity chromatography
Root lectin; (Peanut); (*Arachis hypogaea*) (Kalsi, G. (1117) 114)

Affinity labeling
Thyroid hormone; Deiodination; Animal; Liver; Selenium; Bromoacetyl iodothyronine (Schoenmakers, C.H.H. (1121) 160)

5′-Nucleotidase; Limited proteolysis; Protein domain organization; N-linked carbohydrate (Stochaj, U. (1122) 327)

Affinity purification
Scatter factor; Cell membrane protein; Receptor; (MDCK cell) (Joseph, A. (1105) 141)

Affinity-state transition
Nicotinic acetylcholine receptor; Fourier transform; Ion flux response; Protein–lipid interaction; Cholesterol; (*T. californica*) (Sunshine, C. (1108) 240)

Affinoblotting
Neuraminidase; Kurloff cell; Glycoprotein; Lectin; Glycosidase; Sialidase; Acid phosphatase (Landemore, G. (1116) 112)

Agarose thread
NMR, ^{31}P-; Hepatocyte; Hepatotoxicity; Ethanol; Acetaminophen; Allyl alcohol; Fructose (Farghali, H. (1139) 105)

Aggrecan
Insulin-like growth factor-I, IGF-1; Articular cartilage; Proteoglycan; Link protein; Hyaluronan; (Human) (Curtis, A.J. (1135) 309)

Aggregate formation
α-Crystallin; Protein domain; Protein engineering; Heat shock protein (Merck, K.B. (1130) 267)

Aggregation
Lasalocid A; Ionophore; Model membrane; Fluorescence self quenching (Chattopadhyay, A. (1104) 147)

High pressure; Temperature; Protein; Secondary structure; Infrared spectroscopy; Denaturation (Ismail, A.A. (1121) 183)

Aging
Mitochondrial myopathy; Parkinson's disease; Complex I dysfunction (Cooper, J.M. (1101) 198)

Mitochondrion; Phosphate carrier; Phospholipid; Acetyl-L-carnitine (Paradies, G. (1103) 324)

Thiamin; Intestinal transport; Microvillous membrane vesicle; (Rat) (Gastaldi, G. (1105) 271)

Sodium–calcium ion exchanger; Voltage sensitivity; Calcium ion channel; Intracytosolic calcium ion; Calcium ion, intracytosolic; Cerebrocortical nerve ending (Canzoniero, L.M.T. (1107) 175)

Human lens; Cataractogenesis; Fluorescence; Non-enzymatic glycation (Nagaraj, R.H. (1116) 34)

Senescence; Protein; Two-dimensional electrophoresis; SMP30; (Rat liver) (Fujita, T. (1116) 122)

Non-enzymatic glycosylation; Glycation; Diabetes mellitus; Serum albumin; Diclofenac; Aspirin (Van Boekel, M.A.M. (1120) 201)

Crystallin; Lens; Raman spectroscopy; In situ spectroscopy; (Rabbit); (Guinea-pig) (Ozaki, Y. (1121) 245)

Collagen; X-ray diffraction; Diabetes (Naresh, M.D. (1122) 161)

Transgenic mice; Total iron binding capacity; Transferrin; Albumin; Serum amyloid protein; C3; Acute phase reaction (Adrian, G.S. (1132) 168)

Senescence; cDNA; SMP30; (Rat liver) (Fujita, T. (1132) 297)

X-ray diffraction; Glycation; Cornea; Collagen (Malik, N.S. (1138) 222)

Agonist
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Agonist binding
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AIDS
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HIV; Cytolysis; Hemolysis; Virus; HIV glycoprotein 41000 (gp41) (Mobley, P.W. (1139) 251)

Circular dichroism; FTIR; Electron spin resonance; HIV; Fusion; Lysis; HIV glycoprotein 41000 (gp41) (Gordon, L.M. (1139) 257)

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Chloride channel; Mole fraction; Cystic fibrosis; Ion permeation (Wilk-Blaszczak, M.A. (1104) 160)

β-Alanine
D-3-Aminoisobutyrate–pyruvate aminotransferase; 5-Fluorouracil; α-Fluoro-β-alanine; D-3-Aminoisobutyrate; 4-Aminobutyrate aminotransferase; (Rat) (Kaneko, M. (1122) 45)

β-Alanine transaminase
Mutation; (*D. melanogaster*) (Weber, J.P. (1115) 181)

D-Alanine
D-Proline; D-Serine; D-Isomer; HPLC (Nagata, Y. (1115) 208)

D-Alanyl-D-alanine peptidase
Enzyme kinetics; Crystalline kinetics; 4,4′-Dithiodipyridine-coupled reaction; Hippuryl-mercaptoacetic acid (Kelly, J.A. (1119) 256)

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Heat production; Oxygen consumption; Oxycaloric equivalent; Lactate dehydrogenase leakage; (Rat hepatocyte) (Clark, D. (1098) 240)

Merocyanine 540; Serum; Lipoprotein; Leukemia cell; Photosensitization (Gaffney, D.K. (1117) 321)

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Amphiphilic amine; Fatty acid; Phosphatidate phosphohydrolase; Sphingosine; (Rat hepatocyte) (Gomez-Muñoz, A. (1127) 49)

Polymorphonuclear leukocyte; Platelet-activating factor; Fatty acid; (Human) (Wheelan, P. (1127) 284)

LDL; Lipid peroxidation; Superoxide dismutase; Atherosclerosis; Antioxidant (Thomas, C.E. (1128) 50)

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Transgenic mice; Total iron binding capacity; Transferrin; Serum amyloid protein; C3; Aging; Acute phase reaction (Adrian, G.S. (1132) 168)

Insulin; Transcription; Gene expression; Phorbol ester; (Rat hepatoma cell) (Messina, J.L. (1137) 225)

Alcohol
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Diphenylhexatriene; Blood platelet; Membrane fluidity; Adenylate cyclase; (Bovine blood) (Kitagawa, S. (1112) 14)

Lipoxygenase; Inhibition; Thiol; Alkyl compound (Kuninori, T. (1125) 49)

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Alcohol dehydrogenase
Aldolase; Parvalbumin; Tryptophan triplet state; Cytochrome *c* reduction; Phosphorescence (Dadak, V. (1100) 33)

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Alcohol–membrane interaction
Hydrogen bonding; Dehydration; FTIR (Chiou, J.-S. (1110) 225)

Aldehyde dehydrogenase
Methylmalonate semialdehyde dehydrogenase; Methylmalonate semialdehyde; Malonate semialdehyde; *p*-Nitrophenyl acetate; Esterase; Acetyl-CoA (Popov, K.M. (1119) 69)

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Aldehyde reductase
Aldose reductase; Aldo-keto reductase; (*S. salmonicolor*) (Kataoka, M. (1122) 57)

Aldo-keto reductase
Aldehyde reductase; Aldose reductase; (*S. salmonicolor*) (Kataoka, M. (1122) 57)

Aldolase
Alcohol dehydrogenase; Parvalbumin; Tryptophan triplet state; Cytochrome *c* reduction; Phosphorescence (Dadak, V. (1100) 33)

Phosphoric ester; Active site; Binding constant; Substrate analog (Ogata, H. (1119) 123)

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Aldolase A
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Aldose reductase
Carboxymethylation; Activation; Isotope effect; Diabetic complication; (Bovine lens) (Liu, S.-Q. (1120) 329)

Enzyme purification; Poly(ethylene glycol) tractionation; Electrospray mass spectrometry; (Pig lens) (Reymann, J.-M. (1122) 1)

Aldehyde reductase; Aldo-keto reductase; (*S. salmonicolor*) (Kataoka, M. (1122) 57)

Alga
Ultramicroelectrode; Intracellular oxygen; Light irradiation; Protoplast; Oxygen (Matsue, T. (1101) 69)

Amino acid sequence; Phycobiliprotein; Chromophore; (Chroomonas CS24) (Godovac-Zimmermann, J. (1120) 117)

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Cryptand; Temperature jump; Ionizable mobile carrier; Kinetics; Cholesterol; Lipid membrane (Wehrli, S. (1107) 319)

Alkaline adaptation
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Alkaline phosphatase
Placenta; Luciferase; cyclic AMP; Sodium butyrate; Transcription; JEG-3 cell (Povinelli, C.M. (1115) 243)

Plasma membrane; Protein phosphorylation; Phosphorylated intermediate; (Rat liver) (Sarrouilhe, D. (1118) 116)

Alkaline solubilization
Acetylcholinesterase; Sarcoplasmic reticulum; Amphiphilic monomer (Moya-Quiles, M.R. (1121) 88)

Alkaloid
Chain elongation; Elongation factor; Inhibition; (Cephalotaxus) (Tujebajeva, R.M. (1129) 177)

Alkoxyl
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Alkylacyl
Ether phospholipid; Plasmalogen; PAF; Acetyltransferase; Invertebrate lipid (Sugiura, T. (1126) 298)

Alkylacylglycerophosphocholine
Phospholipase A_2; Human synovial fluid; Arachidonate metabolism; Phosphatidylcholine (Cabré, F. (1124) 297)

Alkylation
DNA injection; Bacteriophage T7; DNA repair; Phage inactivation (Czaika, G. (1130) 52)

Alkyl compound
Lipoxygenase; Inhibition; Alcohol; Thiol (Kuninori, T. (1125) 49)

Alkyl glycoside
Liposome; Synthetic amphiphile (Daicho, Y. (1107) 61)

Alkylphosphocholine
Phospholipase C; Synthetic phospholipid; Diacylglycerol; Lysophospholipid (Ries, U. (1125) 166)

Alkyl phospholipid
Antineoplastic agent; Nutrient transport system (Hoffman, D.R. (1127) 74)

Alkylresorcinol
Long-chain alkylresorcinol; Bimolecular lipid membrane; Phospholipid; Mitochondrial respiration; (*Azotobacter*) (Bitkov, V.V. (1108) 224)

Allantoin
Uric acid; Separation procedure; Purine catabolism; Formate; (Rat liver) (Di Stefano, A. (1117) 1)

Allelic product
Amino acid sequence; Alternative splicing; Cytosolic; Signature sequence; Erythrocyte (Dissing, J. (1121) 261)

Allomerization
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Allosteric effect
ATPase, Na^+/K^+-; Cytoplasmic sodium activation; Cytoplasmic potassium inhibition; Potassium ion, cytoplasmic; Sodium ion–sodium ion exchange (Cornelius, F. (1108) 190)

Allyl alcohol
NMR, ^{31}P-; Hepatocyte; Hepatotoxicity; Ethanol; Acetaminophen; Fructose; Agarose thread (Farghali, H. (1139) 105)

Alpha-helical content
Amphipathic α-helical structure; Liposome; Membrane fusion; Fusogen (Lee, S. (1103) 157)

Alpha hydroxylation
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Alpha-toxin
α-Toxin; Multilamellar liposome; Membrane channel; Fatty acyl domain; Phospholipid; (*S. aureus*) (Tomita, T. (1104) 325)

Alternative complement pathway
Liposome; Phosphatidylcholine, hydrogenated; Drug carrier; Stability; Plasma; Opsonin; iC3b; (Rat) (Funato, K. (1103) 198)

Alternative splicing
Amino acid sequence; Allelic product; Cytosolic; Signature sequence; Erythrocyte (Dissing, J. (1121) 261)

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Protamine 2; Nuclear protein (Kremling, H. (1132) 133)

Fibroblast growth factor; FGF; Receptor tyrosine kinase; Tyrosine kinase; FGF receptor; Splicing (Jaye, M. (1135) 185)

Aluminum
Sodium ion efflux; ATP; (Barnacle fiber) (Huang, Y.-P. (1103) 77)

Citrate; Sodium ion efflux; Barnacle fiber (Bittar, E.E. (1108) 210)

***Alu* repeat**
In vitro transcription; RNA polymerase III; (Human) (Liu, W.-M. (1132) 306)

***Alu* repetitive sequence**
Branched-chain α-keto acid dehydrogenase complex; Dihydrolipoyl transacylase; (Human) (Lau, K.S. (1132) 319)

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Amide
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Amiloride
Hydrogen peroxide; Xanthine oxidase; Sodium ion channel (Bauer, M.L. (1104) 87)

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Oocyte; Sodium ion channel; Expression; Current-voltage relationship; (Hen intestine); (Colon); (Coprodeum) (Weber, W.-M. (1111) 159)

Amiloride blocker-noise
Sodium ion channel; Current kinetics; Single-channel current; Channel density; (Crab-epithelium) (Zeiske, W. (1105) 245)

Amine surfactant
Glutamate efflux; Energetics; Liposome; Membrane permeabilization; (*C. glutamicum*) (Duperray, F. (1103) 250)

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Intestinal absorption; Membrane fluidity (Sadowski, D.C. (1105) 75)

Phosphate; Permeability; Liposome (Chakrabarti, A.C. (1111) 171)

Transport; Brush border membrane; Gradient; Imino acid; (Rabbit jejunum); (Rabbit ileum) (Munck, L.K. (1116) 83)

Ornithine decarboxylase; Induction; Transcriptional regulation; Translational regulation; (Rat intestine) (Miyamoto, K.-i. (1129) 195)

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Caco-2; Phenylalanine; Uptake; Efflux; Transport (Hu, M. (1135) 233)

Amino acid sequence
Cyanobacterium; Ferredoxin; Flavodoxin; Midpoint redox potential; Isoelectric point; Iron deficiency; (*Synechocystis*) (Bottin, H. (1101) 48)

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Histone; Protamine; (*E. minor*) (Giancotti, V. (1119) 296)

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Growth hormone; Primary structure; Protein purification (Yasuda, A. (1120) 297)

Gene cloning; Serine proteinase; Substrate specificity; (*S. Aureus*) (Yoshikawa, K. (1121) 221)

Alternative splicing; Allelic product; Cytosolic; Signature sequence; Erythrocyte (Dissing, J. (1121) 261)

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Lipoprotein lipase; cDNA sequence; Mutation; Hyperlipoproteinemia; Kinetics (Wang, C.-S. (1123) 1)

HPLC; Fatty acid ω-hydroxylase; Cytochrome *P*-450; Rat kidney microsome; (Human kidney microsome) (Kawashima, H. (1123) 156)

Sodium-proton exchange; cDNA cloning; Polymerase chain reaction; (Rabbit kidney) (Hildebrandt, F. (1129) 105)

Diabetes mellitus; Amyloidogenic; (Dog) (Albrandt, K. (1130) 97)

Protein phosphatase; cDNA; Isoenzyme (Mann, D.J. (1130) 100)

DNA repair enzyme; Apurinic/apyrimidinic endonuclease; cDNA sequence; APX cDNA; (Human) (Seki, S. (1131) 287)

Flavodoxin; Structural gene sequence; Sequence comparison; FMN binding site; (*D. gigas* ATCC 19364 and ATCC 29494) (Helms, L.R. (1131) 325)

Amino acid sequencing
Calmodulin; cDNA cloning; (*Tetrahymena thermophila*); (*Tetrahymena pyriformis*) (Takemasa, T. (1132) 219)

Amino acid substitution
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Amino acid transmitter
Nerve terminal; Synaptosome; Calcium channel (Nicholls, D. (1101) 264)

Amino acid transport
L-Glutamic acid; (*S. pombe*) (Rezková, K. (1103) 205)

NBL-1; Epithelial cell; (Bovine kidney) (Doyle, F.A. (1104) 55)

Leucine; Phenylalanine; Basolateral membrane (Sobrevía, L. (1106) 257)

Muscle; Myotube; Cell culture; System L; Leucine (Yeh, J.-y. (1108) 1)

Thyroid hormone; Tryptophan; Triiodothyronine-binding site; Erythrocyte membrane (Samson, M. (1108) 91)

System L; Calmodulin antagonist; Phorbol ester; Cholera toxin; (JAR human placental cell line) (Ramamoorthy, S. (1136) 181)

Amino acid uptake
Caco-2; L-Proline; Carrier mediated transport; Sodium dependence; (Human intestine) (Nicklin, P.L. (1104) 283)

α-Amino acid
Ovotransferrin; Ferric ion binding; Binding synergy (Battistuzzi, G. (1118) 313)

D-Amino acid oxidase
Enzyme kinetics; Catalytic efficiency; Enzyme mechanism; (*R. gracilis*) (Pollegioni, L. (1120) 11)

Enzyme activity; cDNA; Point mutation; Expression; (Mouse) (Sasaki, M. (1139) 315)

Aminoacylproline hydrolase
Aminopeptidase P; Bradykinin; Radioassay substrate; First-order enzyme kinetics; (Rat); (Guinea pig) (Ryan, J.W. (1119) 133)

Aminopeptidase P; Bradykinin; Substance P; First-order enzyme kinetics; (Antiarrhythmic peptide); (Guinea pig) (Ryan, J.W. (1119) 140)

4-Aminobenzoate hydroxylase
FAD-binding domain; (Monoclonal antibody) (Ogawa, T. (1115) 220)

4-Aminobutyrate aminotransferase
D-3-Aminoisobutyrate–pyruvate aminotransferase; 5-Fluorouracil; α-Fluoro-β-alanine; D-3-Aminoisobutyrate; β-Alanine; (Rat) (Kaneko, M. (1122) 45)

L-Aminocarnitine
Carnitine palmitoyltransferase 2; Long-chain acylcarnitine; Free fatty acid; Lipoprotein; (Rat) (Chiodi, P. (1127) 81)

Aminocephalosporin
Anti-arrhythmic drug; Organic cation transport; Renal secretion; Drug interaction; Proton/organic cation antiport; Procainamide; (LLC-PK_1) (Takano, M. (1108) 133)

***S*-Aminoethyl-L-cysteine**
Pantetheine; Sulfur imino acid; Ketimine; Cystathionine-β-synthase; Pantetheinase (Pitari, G. (1116) 27)

β-Amino fatty acid
β-Hydroxy fatty acid; Surfactin; Iturin; Bacillomycin; Mycosubtilin; (*B. subtilis*) (Besson, F. (1123) 51)

D-3-Aminoisobutyrate
D-3-Aminoisobutyrate–pyruvate aminotransferase; 5-Fluorouracil; α-Fluoro-β-alanine; β-Alanine; 4-Aminobutyrate aminotransferase; (Rat) (Kaneko, M. (1122) 45)

D-3-Aminoisobutyrate–pyruvate aminotransferase
5-Fluorouracil; α-Fluoro-β-alanine; D-3-Aminoisobutyrate; β-Alanine; 4-Aminobutyrate aminotransferase; (Rat) (Kaneko, M. (1122) 45)

Aminopeptidase gene
Nucleotide sequence; (*V. proteolyticus*) (Van Heeke, G. (1131) 337)

Aminopeptidase P
Aminoacylproline hydrolase; Bradykinin; Radioassay substrate; First-order enzyme kinetics; (Rat); (Guinea pig) (Ryan, J.W. (1119) 133)

Aminoacylproline hydrolase; Bradykinin; Substance P; First-order enzyme kinetics; (Antiarrhythmic peptide); (Guinea pig) (Ryan, J.W. (1119) 140)

Aminophospholipid
Phospholipid asymmetry; *t*-Butyl hydroperoxide; Sickle cell; Erythrocyte membrane; Erythrocyte deformation (Sugihara, T. (1103) 303)

Aminophospholipid translocase
Hypotonic hemolysis; Spin label; EPR; (Human erythrocyte) (Schrier, S.L. (1105) 170)

Amiodarone
Mitochondrial channel; Ion channel; Mitochondrial membrane; Permeability; Patch clamp; (Rat heart) (Zorov, D.B. (1105) 263)

Ammonium sulfate
Epidermal growth factor receptor; Tyrosine kinase (Hubler, L. (1133) 307)

Ammonium transport
Thick ascending limb of Henle's loop; Rabbit kidney; $Na^+/K^+/2Cl^-$ cotransporter; Intracellular pH; NMR, ^{31}P- (Von Recklinghausen, I.R. (1136) 129)

Amnion
Prostaglandin; Glucocorticoid; Protein kinase C; (Parturition); (Human) (Zakar, T. (1136) 161)

AMP deaminase
5′-Nucleotidase; Adenosine deaminase; Adenosine kinase; Xanthine oxidase; Nucleoside phosphorylase; (Rat Kidney) (Pawelczyk, T. (1116) 309)

Adenylosuccinate lyase; 2′,3′-Dideoxynucleotide; Substrate activity (Nair, V. (1119) 201)

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Calcium ion extrusion; Calcium ion flux; Calcium pump; ATPase, ($Ca^{2+} + Mg^{2+}$)-; Quin2; Chlorotetracycline; (Human platelet) (Johansson, J.S. (1105) 19)

Calcium ion accumulation; Calcium ion flux; Calcium pump; ATPase, ($Ca^{2+} + Mg^{2+}$)-; Quin2; Chlorotetracycline; (Human platelet) (Tao, J. (1105) 29)

Anion channel; Acrosome reaction; Spermatozoon; Bicarbonate transport (Spira, B. (1109) 65)

Alkaline phosphatase; Placenta; Luciferase; Sodium butyrate; Transcription; JEG-3 cell (Povinelli, C.M. (1115) 243)

Calmodulin; Gene regulation; mRNA analysis; Pheochromocytoma cell line; (Rat cell line) (Bai, G. (1130) 189)

Mouse neuroblastoma; Differentiation; Polyamine; Ornithine decarboxylase (Chen, Z.-P. (1133) 1)

Histidine decarboxylase; Calcium; Histidine decarboxylase mRNA (Miyazaki, T. (1133) 179)

Inositol phosphate; Calcium ionophore; Antigen; Agonist; (Rat RBL-1 cell) (Galadari, S.H.I. (1133) 218)

Plasminogen activator inhibitor 2; Leukemia cell line; Protein kinase C; Phorbol ester (Hayashi, T. (1134) 273)

Prostaglandin E_2; Collagen (Fine, A. (1135) 67)

Soleus muscle; Pyruvate dehydrogenase kinase; Free fatty acid; (Rat) (Stace, P.B. (1135) 201)

Prostaglandin E_2 receptor; Insulin; $P388D_1$ cell line; cyclic AMP phosphodiesterase (Rae, M.G. (1135) 343)

Glucose induction; ATPase, H^+-; RAS; Signal transduction; Yeast (Becher dos Passos, J. (1136) 57)

Lipoprotein lipase activity; LPL mRNA; Cholera toxin; Heparin; Heart-cell culture; (Rat heart mesenchymal cell) (Friedman, G. (1137) 237)

Interleukin-1; Prostaglandin E_2 receptor; $P388D_1$ cell line (Rae, M.G. (1138) 75)

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α_1-adrenergic; Protein kinase C; (Obese Zucker rat) (García-Sáinz, J.A. (1135) 221)

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Enzyme characterization; Testis; (Rat) (Weiss, J. (1136) 208)

cyclic AMP metabolism
cyclic AMP phosphodiesterase; Adipocyte; Ovariectomy; (Rat) (Lacasa, D. (1136) 99)

cyclic AMP phosphodiesterase
Prostaglandin E_2 receptor; Insulin; $P388D_1$ cell line; cyclic AMP (Rae, M.G. (1135) 343)

Adipocyte; Ovariectomy; cyclic AMP metabolism; (Rat) (Lacasa, D. (1136) 99)

cyclic AMP receptor protein
Circular dichroism; αCRP (Blazy, B. (1120) 223)

Amphipathic α-helical structure
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Amphiphile
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Amphiphile solubility
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Amphiphilic amine
Albumin; Fatty acid; Phosphatidate phosphohydrolase; Sphingosine; (Rat hepatocyte) (Gomez-Muñoz, A. (1127) 49)

Amphiphilic monomer
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Amphotericin B
Antifungal agent; Phospholipid; ABLC; Ribbon-like structure; Liposome (Perkins, W.R. (1107) 271)

Polyene antibiotic; Liposome; Ergosterol; Cholesterol; Phosphatidylcholine; Dimyristoylphosphatidylcholine (Cohen, B.E. (1108) 49)

Cholesterol complex; Molecular mechanics; Channel structure; Permeability; Channel selectivity (Khutorsky, V.E. (1108) 123)

Plasma membrane; Membrane potential; Hepatocyte; Mitochondrion; Tetraphenylphosphonium (Saito, S. (1111) 221)

Amphotericin methyl ester; Conformation; Theoretical study (Meddeb, S. (1112) 266)

Glucose metabolism; NMR, ^{1}H-, ^{13}C-; (*S. cerevisiae*) (Wietzerbin, J. (1136) 105)

Amphotericin methyl ester
Amphotericin B; Conformation; Theoretical study (Meddeb, S. (1112) 266)

Amylase
Active site; Site-directed mutagenesis; (*B. subtilis*) (Takase, K. (1120) 281)

Proteolysis; Raw-starch-digesting amylase; Subtilisin digestion; Hydrolytic domain; Peptide; Active site; (*B. circulans* F-2) (Kim, C.-H. (1122) 243)

Catalytic site; Site-directed mutagenesis; Catalytic mechanism; (*B. subtilis*) (Takase, K. (1122) 278)

Amylase release
Secretory granule; Membrane; Calcium ion; ATP, Mg^{2+}-; (Rat parotid gland) (Mizuno, M. (1116) 104)

Cytosolic Ca^{2+} concentration; Muscarinic stimulation; Rat parotid acinar cell (Tojyo, Y. (1134) 278)

Amylin
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Amyloidogenic
Diabetes mellitus; Amino acid sequence; (Dog) (Albrandt, K. (1130) 97)

Amyloid precursor protein
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Anaerobic electron transport
Molybdopterin; Iron-sulfur protein; Trimethylamine *N*-oxide; Electron transport; Membrane protein (Weiner, J.H. (1102) 1)

Anaerobic growth
Quinone; Nitrate reductase; Mutant; Aerobic growth (Pommier, J. (1107) 305)

Analytical centrifugation
Density; Lipid vesicle; Lipoprotein; Membrane protein–lipid vesicle (Lustig, A. (1115) 89)

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Androgen dependency
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Androgen induction
Cancer; Heparin-binding growth factor; Shionogi carcinoma; Androgen dependency; (Mouse) (Kawamoto, K. (1134) 183)

Androgen metabolism: Species comparison
Prostaglandin 9-oxoreductase; Structure homology; (Rat) (Inazu, N. (1116) 50)

Androgen synthesis
Primary cell culture; Bovine adrenal; Cytochrome $P\text{-}450_{17\alpha,\text{lyase}}$; Steroidogenesis (Yamazaki, T. (1134) 143)

5-Androsten-3β-ol
Cholesterol oxidase; Cholesterol; Lipid interaction; Sterol oxidation (Slotte, J.P. (1124) 23)

Androstenedione
Steroidogenesis; Ovarian microsome; Cytochrome $P\text{-}450_{17\alpha,\text{lyase}}$; Successive reaction (Yamazaki, T. (1125) 335)

Androsterone
Sulfotransferase; Development; Isoenzyme; Isoelectric variant; (Rat liver) (Homma, H. (1121) 69)

Androsterone UDP-glucuronosyltransferase
Genetic deficiency; Gene deletion; Polymerase chain reaction; (Rat) (Homma, H. (1138) 34)

Anemia
Hemoglobin; Unstable hemoglobin; Hemolysis; Deamidation; Oxygen affinity (Wajcman, H. (1138) 127)

Anesthesia
Surface conductance; Dielectric constant; Phospholipid vesicle; Activation energy (Yoshino, A. (1107) 55)

Anesthesia theory
α-Chymotrypsin; Kinetics; Activation; Substrate specificity (Seto, T. (1116) 204)

Anesthetic
Interfacial ionization; Spin label; EPR (Miyazaki, J. (1103) 62)

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Local anesthetic; Gramicidin; Lipid bilayer; Ion channel (Bridal, T.R. (1107) 31)

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Angiogenesis
Transforming growth-factor β1; Gene transfer; Tumorigenesis; (Chinese hamster ovary cell line) (Ueki, N. (1137) 189)

Angiotensin II receptor
Hepatocyte; AT_1-receptor; Proto-oncogene; Phorbol ester; c-*fos* (González-Espinosa, C. (1136) 309)

Angiotensinogen
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Anion binding
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Anion binding site
Band 3; Arginine residue; (Human) (Betakis, E. (1110) 75)

Anion channel
Acrosome reaction; Spermatozoon; Bicarbonate transport; cyclic AMP (Spira, B. (1109) 65)

Anion efflux pump
Methotrexate; Efflux route; Efflux inhibitor; ATP level; L1210 cell (Henderson, G.B. (1110) 137)

Anionic channel
Dorsal root ganglion; Whole-cell clamp; Phospholipase A_2; Snake venom; (*Oxyuranus scutellatus scutellatus*) (Possani, L.D. (1134) 210)

Anionic lipid
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Anionic liposome
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Anionic phospholipid
Membrane protein; Interfacial pH; pH, interfacial (Calderón, V. (1106) 251)

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Atrazine; Bicarbonate effect; IRGA; Photosystem stoichiometry (Jursinic, P.A. (1098) 359)

Anion pump
ATPase, Cl^--; Chloride translocation; Reconstitution; Characterization (Ohhashi, T. (1106) 165)

Anion transport
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Band 3 protein; cDNA; Chloride transport; (Mouse erythroid); (*Xenopus* oocyte) (Lepke, S. (1106) 13)

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Enzyme immunoassay; Lipocortin 1; Serum level; (Human) (Uemura, K. (1119) 250)

Lipocortin; Phospholipase A_2; Bile salt; Mixed micelle (Davidson, F.F. (1127) 270)

Calcium/phospholipid binding protein; Lipocortin; Alternative splicing (Towle, C.A. (1131) 223)

Anoxia
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ANP
Atrial natriuretic peptide; Degradation; CPA47 cell; Endothelial cell; HPLC (Frost, S.J. (1112) 45)

Antenna
Chlorophyll; Spectroscopy; Photosynthesis (Hemelrijk, P.W. (1098) 159)

Long-wavelength antenna; Bacteriochlorophyll; Energy transfer; Charge separation; Low temperature efficiency; (*H. chlorum*, *Rps. viridis*) (Kleinherenbrink, F.A.M. (1099) 175)

Chlorophyll; Photosystem II; Polarized light spectroscopy; Pump-probe spectroscopy (Kwa, S.L.S. (1101) 143)

Chlorophyll; Light harvesting complex; Photosystem II; Plant photosynthesis; Pump-probe spectroscopy; Ultrafast spectroscopy (Kwa, S.L.S. (1102) 202)

Anthracycline
Cellular drug resistance; Daunomycin; Drug sensitivity; Leukemia cell P388 (Ferrer-Montiel, A.V. (1104) 111)

8-(2-Anthryl)octanoic acid
Fluorescence quenching; (±)-5,6-Dihydro-6-phenyl-2-*n*-alkyl-imidazo[2,1-*b*]thiazole; Partition coefficient; Large unilamellar liposome (Vermeir, M. (1104) 63)

Anti-allergic activity
Pectic substance; Antihyaluronidase activity; Antihistamine-release activity; (*Gymnema sylvestre*) (Sawabe, Y. (1137) 274)

Anti-arrhythmic drug
Organic cation transport; Renal secretion; Drug interaction; Proton/organic cation antiport; Aminocephalosporin; Procainamide; ($LLC\text{-}PK_1$) (Takano, M. (1108) 133)

Antibody
ATPase, H^+/K^+-; Gastric secretion; Topography; Synthetic peptide; Membrane protein (Smolka, A. (1108) 75)

Lipid; Acyl-CoA; Very long chain fatty acid (VLCFA); Elongating system; Icosanoyl-CoA synthase; (*Allium porrum*) (Bessoule, J.-J. (1117) 78)

Mineralocorticoid; Receptor; Immunohistochemistry; Photoaffinity; Spirolactone; (Heart) (Mirshahi, M. (1120) 17)

ATPase, H^+/K^+; cDNA cloning; Topology (Bamberg, K. (1131) 69)

Anti-idiotypic antibody; Toxin; Curaremimetic toxin; Myasthenia gravis (Pillet, L. (1138) 282)

Antibody active site
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Antibody-polylysine conjugate
Cationic liposome; DNA delivery; Transfection; Endothelial cell (Trubetskoy, V.S. (1131) 311)

Anti-cancer action
Tamoxifen; Computer molecular-modelling; Liposome; Cholesterol coefficient; Lipid peroxidation; Anti-fungal action (Wiseman, H. (1138) 197)

α_1-Antichymotrypsin
Microheterogeneity; Breast carcinoma; MCF-7; Growth regulation (Laursen, I. (1121) 119)

Anti-E1 sera
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Antifungal action
Tamoxifen; Computer molecular-modelling; Liposome; Cholesterol coefficient; Lipid peroxidation; Anti-cancer action (Wiseman, H. (1138) 197)

Antifungal agent
Amphotericin B; Phospholipid; ABLC; Ribbon-like structure; Liposome (Perkins, W.R. (1107) 271)

Antigen
Glucocorticoid; Protein synthesis; Protein phosphorylation; Protein dephosphorylation; (Rat basophilic leukemia cell) (Her, E. (1133) 63)

cyclic AMP; Inositol phosphate; Calcium ionophore; Agonist; (Rat RBL-1 cell) (Galadari, S.H.I. (1133) 218)

Melanoma; Monoclonal antibody; Antimetastatic (Gersten, D.M. (1138) 109)

Antigen–antibody affinity constant
Liquid–liquid partition; Horseradish peroxidase (Winzor, D.J. (1115) 141)

Antihistamine-release activity
Pectic substance; Antihyaluronidase activity; Anti-allergic activity; (*Gymnema sylvestre*) (Sawabe, Y. (1137) 274)

Antihyaluronidase activity
Pectic substance; Antihistamine-release activity; Anti-allergic activity; (*Gymnema sylvestre*) (Sawabe, Y. (1137) 274)

Anti-idiotypic antibody
Antibody; Toxin; Curaremimetic toxin; Myasthenia gravis (Pillet, L. (1138) 282)

Antimetastatic
Melanoma; Monoclonal antibody; Antigen (Gersten, D.M. (1138) 109)

Antimicrobial peptide
Lactoferrin; Bactericidal domain; Lactoferricin (Bellamy, W. (1121) 130)

Antineoplastic agent
Alkyl phospholipid; Nutrient transport system (Hoffman, D.R. (1127) 74)

Antioxidant
Zinc; Carnosine; Active oxygen species; Free radical; Anti-ulcer drug (Yoshikawa, T. (1115) 15)

Catecholamine-melanin; DOPA-melanin; Cardiolipin; Lipid peroxidation; Melanin (Porębska-Budny, M. (1116) 11)

Reduced coenzyme Q homolog; Free radical; (Rat hepatocyte) (Matsura, T. (1123) 309)

Reduced coenzyme Q homolog; α-Tocopherol; Free radical; (Rat hepatocyte) (Matsura, T. (1127) 277)

LDL; Lipid peroxidation; Albumin; Superoxide dismutase; Atherosclerosis (Thomas, C.E. (1128) 50)

Probucol; Lipid peroxidation (Gotoh, N. (1128) 147)

Lymphocyte proliferation; Reactive oxygen species; Ornithine decarboxylase; Polyamine; (T cell) (Hunt, N.H. (1133) 261)

Endothelial cell injury; 15-HPETE; Lipid peroxidation; Radical scavenger; Iron chelator (Ochi, H. (1136) 247)

Antioxidant activity
Carotenoid; Xanthophyll; Phospholipid peroxidation; Peroxyl radical trapping (Lim, B.P. (1126) 178)

Anti-peptide antibody
Thylakoid membrane; Photosystem II; Light harvesting complex; *CAB* gene; (Petunia); (Spinach); (Tomato) (Sigrist, M. (1098) 191)

ATP synthase; Beta subunit; Mitochondrion; (Human) (Noer, A.S. (1099) 123)

ATPase, Ca^{2+}-; ATPase, Na^+/K^+-; ATPase, H^+/K^+-; Sarcoplasmic reticulum; Transverse tubular membrane; Monoclonal antibody (Molnar, E. (1103) 281)

Ribonuclease; Multiplicity; Immunoblotting; (Human urine) (Yasuda, T. (1121) 331)

α_2-Antiplasmin
Plasminogen; Staphylokinase; Fibrin (Lijnen, H.R. (1118) 144)

Antiplatelet agent
Platelet; Collagen; Mural thrombogenesis; Carbamoylpiperidine (Alevriadou, B.R. (1137) 279)

Antiport
Sodium ion–proton exchange; Protein kinase C; (Rat thyroid) (Törnquist, K. (1106) 221)

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α_1-Antitrypsin
Free radical; Diabetes; Copper(II) ion (Hall, P.K. (1121) 325)

Insulin-dependent diabetes; Plasma; ATPase, Na^+/K^+-; Protein purification; (Human) (Finotti, P. (1139) 122)

α1-Antitrypsin
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Antitumor drug
Plasma membrane; NADH oxidase; Electron transport; Adriamycin-transferrin conjugate; Transferrin-adriamycin conjugate; (HeLa cell) (Sun, I.L. (1105) 84)

Anti-ulcer drug
Antioxidant; Zinc; Carnosine; Active oxygen species; Free radical (Yoshikawa, T. (1115) 15)

Aorta
Collagen; Hypertension; SHRSP (Matsumura, S. (1139) 1)

Aphidicolin
DNA polymerase; Parasitic protozoon; (*L. mexicana*) (Nolan, L.L. (1120) 322)

Apical membrane
Brush-border membrane; Single channel; Fusion; (Rabbit kidney) (Bellemare, F. (1105) 10)

Apigenin
Vasorelaxation; Calcium influx; (*A. graveolens*); (Rat aorta) (Ko, F.-N. (1115) 69)

Apo A-I
Prostacyclin; HDL; HSA; Stabilization mechanism (Tsai, A.-l. (1115) 131)

Apo E
Apolipoprotein (a); Lipoprotein binding (Bard, J.-M. (1127) 124)

Apo E gene
Type III hyperlipoproteinemia; Apolipoprotein (apo) E1; Restriction fragment length polymorphism (Moriyama, K. (1128) 58)

Apolipophorin III
Insect apolipoprotein; Monomolecular layer; Protein–lipid interaction; Lipoprotein metabolism (Demel, R.A. (1124) 151)

Apolipoprotein
Lipoprotein; Sepsis; Hypertriglyceridemia (Lanza-Jacoby, S. (1124) 233)

Lipoprotein; Lipoprotein A-II; Lipid; Immunoaffinity chromatography; (Human plasma) (Bekaert, E.D. (1126) 105)

HDL; LDL; Cholesteryl ester transfer protein; Non-esterified fatty acid (Lagrost, L. (1127) 255)

Lecithin-cholesterol acyltransferase; Cholesteryl ester; Phospholipid; Cholesterol; HDL (Vanloo, B. (1128) 258)

Apolipoprotein (a)
Apo E; Lipoprotein binding (Bard, J.-M. (1127) 124)

Apolipoprotein A-I
HDL; Cholesterol; Blood protein; (Human) (Ha, Y.C. (1125) 223)

Lipoprotein; Apolipoprotein B; Apolipoprotein E; (Marsupial) (Rainwater, D.L. (1126) 159)

Apolipoprotein E; Enzyme immunoassay; Cholesterol; Reverse cholesterol transport; (WHHL rabbit) (Mezdour, H. (1127) 116)

Lipoprotein; HDL; Oxidized lipoprotein; Ultraviolet; Peroxidation; Cytotoxicity; (Lymphoblastoid cells) (Alomar, Y. (1128) 163)

Photoperoxidation; HDL; Apolipoprotein A-II; SDS-PAGE; Immunoblot; Monoclonal antibody (Salmon, S. (1128) 167)

Apolipoprotein A-I diet
Gene expression; Apolipoprotein A-II diet; (Mouse strain) (Srivastava, R.A.K. (1125) 251)

Apolipoprotein A-II
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Photoperoxidation; HDL; Apolipoprotein A-I; SDS-PAGE; Immunoblot; Monoclonal antibody (Salmon, S. (1128) 167)

Apolipoprotein A-II diet
Gene expression; Apolipoprotein A-I diet; (Mouse strain) (Srivastava, R.A.K. (1125) 251)

Apolipoprotein A-IV genetic polymorphism
Hyperlipidemia; Plasma lipid; Plasma lipoprotein (Tenkanen, H. (1138) 27)

Apolipoprotein B
Lipoprotein; Apolipoprotein A-I; Apolipoprotein E; (Marsupial) (Rainwater, D.L. (1126) 159)

LDL; Lipoprotein oxidation; Intracellular storage; (Mouse macrophage) (Jessup, W. (1126) 167)

Lipoprotein; Mathematical model; Perinatal period; (Rat yolk sac) (Plonné, D. (1127) 174)

Apolipoprotein B-100
Hypercholesterolemia; LDL receptor binding; LDL turnover; (Cynomolgus monkey) (Spilman, C.H. (1128) 26)

Apolipoprotein E
Lipoprotein; Apolipoprotein A-I; Apolipoprotein B; (Marsupial) (Rainwater, D.L. (1126) 159)

Apolipoprotein A-I; Enzyme immunoassay; Cholesterol; Reverse cholesterol transport; (WHHL rabbit) (Mezdour, H. (1127) 116)

Apolipoprotein (apo) E1
Type III hyperlipoproteinemia; Apo E gene; Restriction fragment length polymorphism (Moriyama, K. (1128) 58)

Apolipoprotein structure
Lipid transport; (Calf) (Sparrow, D.A. (1123) 145)

Apoprotein-B
Simvastatin; Ciprofibrate; Cholesterol synthesis; HepG2; mRNA; LDL-receptor; HMG-CoA reductase (Qin, W. (1127) 57)

Apoptosis
Bcl-2; Oncoprotein; Mitochondrion; Nucleotide sequence; Programmed cell death; (Chicken) (Cazals-Hatem, D.L. (1132) 109)

Programmed cell death; Necrosis; Flow cytometric analysis; Heterogeneity (Dive, C. (1133) 275)

Di- and polyamine γ-glutamyl derivative; Cell proliferation; Retinoic acid (Piacentini, M. (1135) 171)

Cell death; DNA fragmentation; Hydroxyurea; Burkitt's lymphoma (Johnson, C.A. (1136) 1)

Apurinic/apyrimidinic endonuclease
DNA repair enzyme; cDNA sequence; Amino acid sequence; APX cDNA; (Human) (Seki, S. (1131) 287)

APX cDNA
DNA repair enzyme; Apurinic/apyrimidinic endonuclease; cDNA sequence; Amino acid sequence; (Human) (Seki, S. (1131) 287)

Aquacobalamin reductase
Vitamin B-12; Cobalamin; NADPH-cytochrome *c* (*P*-450) reductase; (Rat liver microsome) (Watanabe, F. (1119) 175)

Aqueous boundary layer
Drug absorption; Permeability; Intestinal epithelium; Caco-2; Unstirred water layer (Karlsson, J. (1111) 204)

Aqueous phase
phoE ion channel; Water filled channel; Ionic channel (Gutman, M. (1109) 141)

Aqueous solution
Long-chain fatty acid; Solubility (Vorum, H. (1126) 135)

Aqueous two-phase partition
Thylakoid; P-700; Cytochrome *f*; Sonication; Membrane domain (Albertsson, P.-Å. (1098) 90)

Aqueous two-phase system
Cell surface; Gene expression; Homeobox; *Hox-3.3*; Transfection; (Mouse) (Shimeld, S.M. (1136) 253)

A7r5
Phospholipase A_2; Cell migration; Chemotaxis; Chemokinesis; (Rat smooth muscle cell) (Kanemasa, T. (1125) 210)

Ara C derivative
Perylene fluorescent dye; Fluorescent liposome; Anchor molecule; Immunoliposome (Schott, H. (1110) 151)

Arachidonate
Arachidonic acid; Arachidonate movement; HL-60 cell; Phospholipid, plasmalogen and ether-linked (Blank, M.L. (1124) 262)

Phospholipase A_2; Docosahexaenoate; Phosphatidylethanolamine; Serum; (Rat) (Baker, R.R. (1125) 56)

Arachidonate metabolism
Phospholipase A_2; Human synovial fluid; Alkylacylglycerophosphocholine; Phosphatidylcholine (Cabré, F. (1124) 297)

Leukotriene; Neutrophil; (Human platelet) (Antoine, C. (1128) 139)

Arachidonate movement
Arachidonic acid; Arachidonate; HL-60 cell; Phospholipid, plasmalogen and ether-linked (Blank, M.L. (1124) 262)

Arachidonate release
Phospholipase A_2; Thrombin; Fluoroaluminate; G-protein; cyclic GMP; (Human platelet) (Stasi, M. (1124) 279)

Arachidonic acid
Membrane fluidity; Icosatetraynoic acid; Molecular modeling; DNA synthesis inhibition; Electron microscopy; Steady state fluorescence (Brown, M. (1105) 285)

Sulfhydryl reagent; Thimerosal; Free cytosolic calcium ion; Calcium ion, cytosolic; Membrane potential; (Rat thymocyte) (Gukovskaya, A.S. (1111) 65)

Fungal biosynthesis; Essential fatty acid; Mass spectrometry; Cytochrome *P*-450 oxidation; Fatty acid oxidation; (*G. graminis*) (Brodowsky, I.D. (1124) 59)

Arachidonate; Arachidonate movement; HL-60 cell; Phospholipid, plasmalogen and ether-linked (Blank, M.L. (1124) 262)

Δ^6-Desaturase; Dietary fat; Fasting; Intestinal mucosa; Fatty acid composition (Garg, M.L. (1126) 17)

Phospholipase A_2; Oleoylacetylglycerol; Phorbol myristate acetate; Prostaglandin B_1-oligomer; Aristolochic acid; (Human neutrophil) (Rosenthal, M.D. (1126) 319)

Hepatocyte; Choline phosphoglyceride; Ethanolamine phosphoglyceride; Fatty acid metabolism; Retroconversion; Icosapentaenoic acid (Voss, A. (1127) 33)

Lecithin:cholesterol acyltransferase; Positional specificity; Cholesteryl ester; Phosphatidylcholine (Subbaiah, P.V. (1128) 83)

Lipoxygenase; Cyclooxygenase; Oxygenase; Hydroperoxide; Prostaglandin; Leukotriene; Enzyme immunoassay; Complementary DNA (Yamamoto, S. (1128) 117)

Tissue plasminogen activator; Human embryonic fibroblast; Proteose peptone; Induction; Lipoxygenase (Suzuki, A. (1133) 167)

Megakaryocyte; Lipoxin; Differentiation (Sheppard, K.-A. (1133) 223)

Phospholipase A_2; Insulin secretion; Islets of Langerhans; Glucose (Konrad, R.J. (1135) 215)

Acyltransferase; Phospholipase A_2; Signal transduction; Mouse macrophage (Balsinde, J. (1136) 75)

OK-432; Prostaglandin E_2; Phagocytosis; Cytochalasin B; (Rat peritoneal macrophage) (Watanabe, M. (1138) 157)

Arachidonic acid metabolism
Pancreas islet; Insulin; Icosanoid; (Rodent); (Human) (Turk, J. (1125) 280)

Arachidonic acid release
PAF-acether, biosynthesis; Ether phospholipid; Immunoglobulin E; (Mast cell) (Joly, F. (1125) 305)

Phospholipase C, PC-, PI-; Diacylglycerol; Exogenous phospholipase C; (HeLa cell) (Schiess, K. (1137) 82)

Arachidonic acid turnover
1,25-Dihydroxyvitamin D-3; 24,25-Dihydroxyvitamin D-3; Chondrocyte; Phospholipase A_2; Cell differentiation (Swain, L.D. (1136) 45)

Archaebacterium
ATP synthase; Protein folding; (*Sulfolobus*) (Schäfer, G. (1101) 232)

P-glycoprotein; Glycoprotein; Doxorubicin; Multidrug resistance (Miyauchi, S. (1110) 144)

Liposome; Halophile; Permeability; NMR, ^{1}H-; FABMS (Yamauchi, K. (1110) 171)

Glutamate dehydrogenase; Hyperthermophile; Enzyme purification; Enzyme characterization; (*P. furiosus*) (Robb, F.T. (1120) 267)

Pyrophosphatase; Stability; Denaturation; Thermophile; (*S. acidocaldarius*) (Wakagi, T. (1120) 289)

Proteinase; Thermophile; Thermostability; (*S. solfataricus*) (Burlini, N. (1122) 283)

Archaeon
tRNA gene; Methanogen; Hyperthermophile; Promoter (Palmer, J.R. (1132) 315)

Area-tension interrelation
Film area compression; Quasi static compression; Dynamic cycling; Bubble clicking (Schürch, S. (1103) 127)

L-Arginine
Nitric oxide; EPR; Lipopolysaccharide; L-[*Guanidineimino*-$^{15}N_2$]arginine (Kubrina, L.N. (1099) 233)

L-[*Guanidineimino*-$^{15}N_2$]Arginine
Nitric oxide; L-Arginine; EPR; Lipopolysaccharide (Kubrina, L.N. (1099) 233)

Arginine kinase
Tail muscle; NMR, ^{31}P-; (*Sycionia ingentis*) (Fan, T.W.-M. (1135) 44)

Arginine residue
Phosphate transport; Glucose transport; Kidney; (Rat) (Strévey, J. (1106) 110)

Band 3; Anion binding site; (Human) (Betakis, E. (1110) 75)

Aristolochic acid
Phospholipase A_2; Arachidonic acid; Oleoylacetylglycerol; Phorbol myristate acetate; Prostaglandin B_1-oligomer; (Human neutrophil) (Rosenthal, M.D. (1126) 319)

Aromatic L-amino acid decarboxylase
3,4-Dihydroxyphenylalanine; Isoelectric focusing; (Bovine); (Human) (Nasrin, S. (1118) 318)

Arrestin
FTIR; Phototransduction; S-antigen; Secondary structure (Garcia-Quintana, D. (1122) 269)

Arsenite
Cystine transport; Glutathione; Endothelial cell (Deneke, S.M. (1109) 127)

Arterial blood
Mitochondrion; Mitochondrial redox state; (Liver); (Human) (Ozawa, K. (1138) 350)

Arthritis
Bradykinin; Inflammation; Osteoblast-like cell; Prostaglandin E_2; Interleukin-6; Interleukin-1; (Human) (Rahman, S. (1135) 97)

Articular cartilage
Insulin-like growth factor-I, IGF-1; Proteoglycan; Aggrecan; Link protein; Hyaluronan; (Human) (Curtis, A.J. (1135) 309)

Articular chondrocyte
Interleukin-1; Purinoceptor, P_2; Prostaglandin E (Caswell, A.M. (1137) 52)

Arylsulfatase
Lysosomal enzyme; Post-translational processing; Protein sequence (Fujii, T. (1122) 93)

Arylsulfatase A and B
Spermatozoan; Seminal plasma; Sulfogalactosylceramide; Seminolipid (Gadella, B.M. (1128) 155)

Ascorbate
Ascorbate free radical; Dehydroascorbate; Membrane potential; Proton secretion; (*A. cepa*) (González-Reyes, J.A. (1098) 177)

Ascorbate free radical
Ascorbate; Dehydroascorbate; Membrane potential; Proton secretion; (*A. cepa*) (González-Reyes, J.A. (1098) 177)

Ascorbic acid
Cell-free transfer; NADH; Golgi apparatus; Plasma membrane; (Rat liver) (Rodriguez, M. (1107) 131)

Glycation; Carboxymethyllysine; Oxidation; Protein modification; Lens protein (Slight, S.H. (1117) 199)

Glycation; α-Crystallin; Lens carboxymethylation; Lens peptide; Mass spectrometry (Ortwerth, B.J. (1117) 207)

Dehydroascorbic acid; Glutathione; Glutathione disulfide; Redox couple; Oxidation-reduction; Ascorbic acid regeneration (Winkler, B.S. (1117) 287)

Cytochrome *b*-561; Horseradish peroxidase; Chromaffin vesicle; Electron transfer (Harnadek, G.J. (1135) 280)

Ascorbic acid regeneration
Ascorbic acid; Dehydroascorbic acid; Glutathione; Glutathione disulfide; Redox couple; Oxidation-reduction (Winkler, B.S. (1117) 287)

Aspartate/glutamate carrier
Mitochondrion; Reconstitution; Protein modification; Carbodiimide; Carrier-mediated transport (Dierks, T. (1103) 13)

Transport; Reconstitution; Liposome; Mitochondrion; (Bovine heart) (Bisaccia, F. (1106) 291)

Aspartate transcarbamoylase
Enzyme inactivation; Procion Red HE3B; (Wheat germ) (Easton, M.J. (1118) 298)

Aspartic proteinase
Zymogen; Activation; Prosegment peptide; Sequence homology (Foltmann, B. (1121) 75)

Aspartokinase-homoserine dehydrogenase I
Homoserine dehydrogenase; Kinetic mechanism; Equilibrium isotope exchange kinetics; (*E. coli*) (Wedler, F.C. (1119) 247)

Aspirin
Non-enzymatic glycosylation; Glycation; Diabetes mellitus; Aging; Serum albumin; Diclofenac (Van Boekel, M.A.M. (1120) 201)

Thromboxane; Prostacyclin; Prostaglandin E_2; Urine; Platelet; Vessel; Kidney; Immuno-affinity; Gas chromatography-mass spectrometry (Chiabrando, C. (1133) 247)

Assembly
NADH:ubiquinone oxidoreductase; Complex I; Chaperone; *(N. crassa)*; *(E. coli)*; *(A. niger)* (Weidner, U. (1101) 177)

Astrocyte
Prion protein; Scrapie-associated fibril-protein; HIV; Transactivation; Encephalopathy (Müller, W.E.G. (1139) 32)

Astrocytoma
Glutathione *S*-transferase (Strange, R.C. (1139) 222)

Asymmetric carrier
Transport kinetics; Periplasmic binding protein; Transport mechanism; Membrane carrier; Bacterial transport; Transport model (Krupka, R.M. (1110) 1)

Transport kinetics; Periplasmic binding protein; Transport mechanism; Membrane carrier; Bacterial transport; Transport model (Krupka, R.M. (1110) 11)

Asymmetric transport
Sodium dependence; Cystine; Brush-border; Electrogenic transport; (Kidney) (McNamara, P.D. (1103) 101)

Atherosclerosis
HDL modification; Malondialdehyde; Cholesterol efflux; HDL binding; Fibroblast (Salmon, S. (1125) 230)

Beta blocker; LDL peroxidation (Mazière, C. (1126) 314)

LDL; Lipid peroxidation; Albumin; Superoxide dismutase; Antioxidant (Thomas, C.E. (1128) 50)

Endothelium; Endothelin; Hypertension; Vasoconstrictor; (Rabbit) (Marsden, P.A. (1129) 245)

Reverse cholesterol transport; High density lipoprotein; Promoter; Enhancer; Genomic sequence (Murray, R.W. (1131) 207)

Lipoprotein; Gene expression; Transcription factor; Lipoprotein lipase; α-Fetoprotein; (Rat liver) (Peinado-Onsurbe, J. (1131) 281)

Atherosclerotic lesion
Lymphocyte; Macrophage; Scavenger pathway (Kotake, H. (1138) 327)

Atomic absorption, K^+
NMR, ^{23}Na-; Potassium ion; Bacterial membrane; Ion transport; Monensin; Ionic selectivity; (*S. faecalis*); (*E. hirae*) (Rabaste, F. (1108) 177)

ATP
Anoxia; Fructose; Mitochondrion; (Perfused liver) (Okabe, H. (1098) 41)

Energy metabolism; Pancreatic islet (Erecińska, M. (1101) 273)

Sodium ion efflux; Aluminum; (Barnacle fiber) (Huang, Y.-P. (1103) 77)

ATPase, Na^+/K^+-; Magnesium ion; Substrate; Pre-steady-state kinetics; Phosphorylation; (Pig kidney) (Campos, M. (1105) 51)

Membrane hyperpolarization; Toxin; Bisoxonol; (Madin-Darby canine kidney cell) (Tauc, M. (1105) 155)

Glutaminolysis; Glycolysis; Macrophage; (BB rat) (Wu, G. (1115) 166)

Matrix vesicle; Calcium deposition (Hsu, H.H.T. (1116) 227)

P_2 purinoceptor; Prostacyclin; Calcium; Phospholipase A_2; (Endothelial cell) (Lustig, K.D. (1134) 61)

Atrial natriuretic peptide (ANP) receptor; Neuroblastoma cell line NB-OK-1; Binding inhibition; (Human) (Delporte, C. (1135) 323)

ATP binding
Skeletal muscle; Potassium ion channel; Calcium ion dependence; (Frog) (Krippeit-Drews, P. (1108) 119)

ATP-binding cassette
Peroxisome; PMP70; Multi-drug resistance; P-glycoprotein (Kamijo, K. (1129) 323)

ATP diphosphohydrolase
Platelet aggregation; Endothelium; Vascular smooth muscle; Purine nucleotide (Côté, Y.P. (1139) 133)

ATP hydrolysis
Hexokinase; Dimethyl sulfoxide (Montero-Lomelí, M. (1120) 305)

ATP level
Anion efflux pump; Methotrexate; Efflux route; Efflux inhibitor; L1210 cell (Henderson, G.B. (1110) 137)

ATP, Mg^{2+}-
Amylase release; Secretory granule; Membrane; Calcium ion; (Rat parotid gland) (Mizuno, M. (1116) 104)

atp operon
Posttranscriptional control; mRNA structure; mRNA stability; Endoribonuclease; Exoribonuclease; Transcriptional terminator; (*E. coli*) (Ziemke, P. (1130) 297)

ATP phosphorylation potential
Guinea-pig myocardium; Creatine kinase; Glyceraldehyde 3-phosphate dehydrogenase; Phosphoglycerate kinase; Cytosolic free magnesium (Mallet, R.T. (1139) 239)

ATP receptor
Norepinephrine release; Calcium channel; Photoaffinity labeling; (PC12 cell) (Majid, M.A. (1136) 283)

ATP-sensitive K-channel
Sulfonylurea; Diazoxide; β-cell; Protein phosphorylation (Niki, I. (1133) 95)

ATP synthase
Electron microscopy; Image analysis; Chloroplast (Boekema, E.J. (1098) 131)

Antipeptide antibody; Beta subunit; Mitochondrion; (Human) (Noer, A.S. (1099) 123)

Adenylate carrier; Adenylate kinase; Mitochondrion; Respiration; (Regulation); (Plant) (Fricaud, A.-C. (1099) 253)

ATP synthesis; ATPase, F_1- (Thomas, P.J. (1101) 228)

Protein folding; Archaebacterium; (*Sulfolobus*) (Schäfer, G. (1101) 232)

Proton translocation; Oligomycin; Mitochondrion; (Plant) (Hamasur, B. (1101) 339)

ATPase, $CF_1(\alpha\beta)$-; $F_1(\alpha\beta)$-core complex; F_0F_1; Tentoxin; (*R. rubrum*) (Gromet-Elhanan, Z. (1102) 379)

ATP synthase δ-subunit
ATPase, F_1 δ-subunit; Mitochondrion; cDNA (Jordan, E.M. (1130) 122)

ATP synthase, F_0F_1-
ATPase, F_1-; Endogenous nucleotide; Catalytic site; (*M. lysodeikticus*) (Mileykovskaya, E.I. (1099) 219)

Mitochondrion; Gene structure (Pierce, D.J. (1132) 265)

ATP synthase, F_1F_0-
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ATP synthesis
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ATP synthase; ATPase, F_1- (Thomas, P.J. (1101) 228)

Sodium bioenergetics; Decarboxylation phosphorylation; Protonmotive force; $\Delta\tilde{\mu}_{H^+}$; $\Delta\tilde{\mu}^{+}_{Na}$ (Dimroth, P. (1101) 236)

2-azido-ATP
F_1; ATPase F_1-; Tightly bound nucleotide; Catalytic site; Non-catalytic site (Hartog, A.F. (1100) 267)

8-azido-ATP
T7 RNA polymerase; Photoaffinity labeling; Active-site mapping (Knoll, D.A. (1121) 252)

8-azido-ATP
Platelet; GPIIb-IIIa; Integrin αIIbβ3; Nucleotide binding; Photoaffinity labeling (Mayinger, P. (1137) 77)

ATPase
pH, intracellular; Fluorescent dye; Plasma membrane; Diethylstilbestrol; Phorbol ester; (*S. cerevisiae*) (Haworth, R.S. (1098) 79)

Thioredoxin; Enzyme activation; Photosynthesis; Cyanobacterium; (*Nostoc*) (Austin, P.A. (1099) 226)

Proton; Protonmotive force; Photosynthesis; (Chloroplast) (Griwatz, C. (1101) 244)

ATPase, H^+-; Liposome; Proton pump; Reconstitution; Tonoplast; Vacuole; (*Kalanchoë*) (Warren, M. (1106) 117)

Gastric ATPase; Proton pump; Somatostatin; Omeprazole (Tari, A. (1129) 49)

ATPase, Ca^{2+}-
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Calcium pump; Basolateral membrane; Parathyroid hormone; 1,25-Dihydroxyvitamin D-3 (Tsukamoto, Y. (1103) 163)

ATPase, Na^+/K^+-; ATPase, H^+/K^+-; Sarcoplasmic reticulum; Transverse tubular membrane; Monoclonal antibody; Anti-peptide antibody (Molnar, E. (1103) 281)

Photolysis; Sarcoplasmic reticulum; FTIR; Caged calcium; Caged ATP (Buchet, R. (1104) 207)

Ionophore A23187; Calcium; Erythrocyte (Wu, L. (1106) 56)

Mathematical model; Erythrocyte (Vincenzi, F.F. (1106) 63)

ATPase, H^+/K^+-; ATPase, Na^+/K^+; AU-1421; Phosphoenzyme; Site-directed probe; (Rabbit skeletal muscle); (Pig stomach); (Sheep kidney) (Fukushima, Y. (1106) 71)

Lipid–protein interaction; Temperature adaptation; Intrinsic tryptophan fluorescence; Fluorescence; CD; FTIR (Vrbjar, N. (1107) 1)

Sarcoplasmic reticulum; Detergent; Proteoliposome; Membrane protein reconstitution (Lévy, D. (1107) 283)

Erythrocyte; D-Glucose; (Human) (Deziel, M.R. (1110) 119)

ATPase, Na^+/K^+-; Sarcoplasmic reticulum; ATPase, Mg^{2+}-; Cultured muscle cell; Maturation; (Human skeletal muscle) (Benders, A.A.G.M. (1112) 89)

Lanthanide binding; Fluorescein isothiocyanate; Catalytic site; Sarcoplasmic reticulum (Ivkova, M.N. (1118) 231)

Gene expression; Cardiac plasma membrane; Sarcoplasmic reticulum function; Cardiomyopathy (Kuo, T.H. (1138) 343)

ATPase, $(Ca^{2+}+Mg^{2+})$-
ATPase-F_1-; Plant mitochondrial ATPase; Inhibitor; Nucleotide specificity; Cation/anion effect (O'Rourke, J.F. (1098) 224)

Calcium ion extrusion; Calcium ion flux; Calcium pump; cyclic AMP; Quin2; Chlorotetracycline; (Human platelet) (Johansson, J.S. (1105) 19)

Calcium ion accumulation; Calcium ion flux; Calcium pump; cyclic AMP; Quin2; Chlorotetracycline; (Human platelet) (Tao, J. (1105) 29)

Calcium ion extrusion; Calcium ion flux; Calcium pump; cyclic GMP; Quin2; Chlorotetracycline; (Human platelet) (Johansson, J.S. (1105) 40)

Human platelet; Calcium pump; Chlorotetracycline; Quin2; Protein kinase C; Phorbol 12-myristate 13-acetate; Calphostin C (Tao, J. (1107) 213)

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ATPase, Ca^{2+}-transporting
Calcium ion transport; Acidic phospholipid; Phosphatase; Plasma membrane (Lehotsky, J. (1105) 118)

ATPase, $CF_1(\alpha\beta)$-
ATP synthase; $F_1(\alpha\beta)$-core complex; F_0F_1; Tentoxin; (*R. rubrum*) (Gromet-Elhanan, Z. (1102) 379)

ATPase, Cl^--
Anion pump; Chloride translocation; Reconstitution; Characterization (Ohhashi, T. (1106) 165)

ATPase, F_1-
Plant mitochondrial ATPase; ATPase, $(Ca^{2+} + Mg^{2+})$-; Inhibitor; Nucleotide specificity; Cation/anion effect (O'Rourke, J.F. (1098) 224)

Endogenous nucleotide; Catalytic site; ATP synthase, F_0F_1-; (*M. lysodeikticus*) (Mileykovskaya, E.I. (1099) 219)

F_1; Tightly bound nucleotide; Catalytic site; Non-catalytic site; 2-Azido-ATP (Hartog, A.F. (1100) 267)

ATP synthesis; ATP synthase (Thomas, P.J. (1101) 228)

2-Azido-ADP; Non-catalytic site; Photolabeling (Edel, C.M. (1101) 329)

ATPase, F_1 δ-subunit
ATP synthase δ-subunit; Mitochondrion; cDNA (Jordan, E.M. (1130) 122)

ATPase, H^+-
Lysophosphatidylcholine; Malate dehydrogenase; Glycerolphosphate dehydrogenase; Cytochrome oxidase; Mitochondrion (Kalous, M. (1098) 167)

Evolution; Vacuolar system; Chloroplast; Mitochondrion (Nelson, N. (1100) 109)

Photophosphorylation; Crosslinking; CF_0CF_1 subunit; Chloroplast (Beckers, G. (1101) 97)

Hydrophobic labeling; TID, $[^{125}I]$-; Cyanogen bromide digestion; Tryptic digestion; Membrane topology; Yeast (Seto-Young, D. (1102) 213)

Water transport; Sodium ion–proton exchange; Proteinase; Mercurial; Enzyme inhibition; Sodium ion/proton antiport; (Rat) (Sabolić, I. (1103) 137)

Thiamin pyrophosphatase; Pyrophosphatase; Golgi apparatus; Proton pumping; Free-flow electrophoresis; Electrophoresis, free flow; (Rat liver) (Brightman, A.O. (1104) 188)

Proton symport; Heavy water; Diethylstilbestrol; (*S. cerevisiae*) (Kotyk, A. (1104) 293)

ATPase; Liposome; Proton pump; Reconstitution; Tonoplast; Vacuole; (*Kalanchoë*) (Warren, M. (1106) 117)

Proteoliposome; Transmembrane protein topography; (*N. crassa*) (Rao, U.S. (1108) 153)

Catalytic subunit; Brush-border membrane; Primary structure; (Kidney) (Sander, I. (1112) 129)

Glucose induction; cyclic AMP; RAS; Signal transduction; Yeast (Becher dos Passos, J. (1136) 57)

ATPase, H^+-
Detergent solubilisation; Electron microscopy; HPLC; Tonoplast; (*B. Vulgaris*) (Ellis, C.M. (1136) 319)

ATPase, H^+/K^+-
ATPase, Ca^{2+}-; ATPase, Na^+/K^+-; Sarcoplasmic reticulum; Transverse tubular membrane; Monoclonal antibody; Anti-peptide antibody (Molnar, E. (1103) 281)

ATPase, Ca^{2+}-; ATPase, Na^+/K^+; AU-1421; Phosphoenzyme; Site-directed probe; (Rabbit skeletal muscle); (Pig stomach); (Sheep kidney) (Fukushima, Y. (1106) 71)

Gastric secretion; Antibody; Topography; Synthetic peptide; Membrane protein (Smolka, A. (1108) 75)

Membrane topology; Iodination (Scott, D.R. (1112) 246)

cDNA cloning; Topology; Antibody (Bamberg, K. (1131) 69)

ATPase inhibitor protein
Calcium ion; Luft's disease; Loosely coupled mitochondrion; Breast cancer; Mitochondrial population (Yamada, E.W. (1139) 143)

ATPase, Mg^{2+}-
P-glycoprotein; Glycoprotein; Multidrug resistance; ATPase, Na^+/K^+-; Detergent solubilization; (CHO cell) (Doige, C.A. (1109) 149)

ATPase, Na^+/K^+-; Sarcoplasmic reticulum; ATPase, Ca^{2+}-; Cultured muscle cell; Maturation; (Human skeletal muscle) (Benders, A.A.G.M. (1112) 89)

ATPase, Na^+/K^+-
Sodium/potassium pump; Potassium ion–potassium ion exchange; Phosphatase, potassium dependent; (Pig kidney) (Berberián, G. (1103) 85)

ATPase, Ca^{2+}-; ATPase, H^+/K^+-; Sarcoplasmic reticulum; Transverse tubular membrane; Monoclonal antibody; Anti-peptide antibody (Molnar, E. (1103) 281)

EGF; Potassium ion channel; Calcium ion activated; Calcium ion activation; (Mouse fibroblast); (Human receptor) (Lovisolo, D. (1104) 73)

Phosphoenzyme; Potassium; Magnesium; Dimethylsulfoxide (Fontes, C.F.L. (1104) 215)

Magnesium ion; ATP; Substrate; Pre-steady-state kinetics; Phosphorylation; (Pig kidney) (Campos, M. (1105) 51)

Sodium ion occlusion; Oligomycin induced; Occlusion; Detergent; (Pig kidney); (Shark rectal gland) (Esmann, M. (1106) 1)

ATPase, Ca^{2+}-; ATPase, H^+/K^+-; AU-1421; Phosphoenzyme; Site-directed probe; (Rabbit skeletal muscle); (Pig stomach); (Sheep kidney) (Fukushima, Y. (1106) 71)

pH, intracellular; Intracellular pH; Intracellular calcium; Intracellular sodium; Ouabain; (Frog skin epithelium) (Ehrenfeld, J. (1106) 197)

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Cytoplasmic sodium activation; Cytoplasmic potassium inhibition; Potassium ion, cytoplasmic; Allosteric effect; Sodium ion–sodium ion exchange (Cornelius, F. (1108) 190)

Potassium ion occlusion; Rubidium ion occlusion; Occlusion; (Shark rectal gland) (Esmann, M. (1108) 247)

Ethylenediamine; Phosphatidylserine (Schuurmans Stekhoven, F.M.A.H. (1109) 17)

P-glycoprotein; Glycoprotein; Multidrug resistance; ATPase, Mg^{2+}-; Detergent solubilization; (CHO cell) (Doige, C.A. (1109) 149)

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Isoenzyme; Heterogeneity; Ouabain binding; ADP binding; Stoichiometry; (Pig kidney) (Jensen, J. (1110) 81)

Sarcoplasmic reticulum; ATPase, Ca^{2+}-; ATPase, Mg^{2+}-; Cultured muscle cell; Maturation; (Human skeletal muscle) (Benders, A.A.G.M. (1112) 89)

Potential-sensitive styryl dye; Membrane fragment; Monomer/dimer equilibrium; Electrochromism; Membrane probe; Fluorescence (Clarke, R.J. (1112) 142)

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β1 subunit; 5′ Flanking sequence; (Rat) (Liu, B. (1130) 336)

Ouabain; Intracellular sodium ion; Sodium pump; Digital imaging microscopy; (Chick-embryo heart cell) (Ahlemeyer, B. (1137) 135)

α_1-Antitrypsin; Insulin-dependent diabetes; Plasma; Protein purification; (Human) (Finotti, P. (1139) 122)

ATPase, $(Na^+ + Mg^{2+})$-
Cholesterol; Epicholesterol; Lipid fluidity; Enzyme modulation; (*A. laidlawii*) (George, R. (1107) 111)

ATPase site
Dynein, 22S; Heavy chain; Thermolysin digestion; Three heads; (*Tetrahymena*) (Niino, Y. (1100) 146)

ATPase, V-type
Molecular cloning; Protein evolution; (*T. thermophilus*) (Tsutsumi, S. (1098) 13)

Atrazine
Anion, monovalent; Bicarbonate effect; IRGA; Photosystem stoichiometry (Jursinic, P.A. (1098) 359)

AT_1-receptor
Hepatocyte; Proto-oncogene; Angiotensin II receptor; Phorbol ester; c-*fos* (González-Espinosa, C. (1136) 309)

Atrial natriuretic peptide
ANP; Degradation; CPA47 cell; Endothelial cell; HPLC (Frost, S.J. (1112) 45)

Atrial natriuretic peptide (ANP) receptor
Neuroblastoma cell line NB-OK-1; ATP; Binding inhibition; (Human) (Delporte, C. (1135) 323)

Atropine
Adenylate cyclase; Intracellular cyclic-AMP; Phospholipid; (*M. gypseum*) (Bindra, A. (1124) 185)

Attached cell
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AU-1421
ATPase, Ca^{2+}-; ATPase, H^+/K^+-; ATPase, Na^+/K^+; Phosphoenzyme; Site-directed probe; (Rabbit skeletal muscle); (Pig stomach); (Sheep kidney) (Fukushima, Y. (1106) 71)

Autoantibody
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Autoimmune antigen Ku
Signal transduction; Viral infection (Quinn, J.P. (1131) 181)

Autolysis
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Autophosphorylation
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Ganglioside; Growth factor; (Swiss 3T3 cell) (Guan, Z. (1136) 315)

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Myoglobin; Heme propionate; (*Aplysia*) (Matsuoka, A. (1118) 123)

Avidin
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AWN-1
Boar sperm protein; Zona pellucida-binding protein; AWN-2 (Sanz, L. (1119) 127)

AWN-2
Boar sperm protein; Zona pellucida-binding protein; AWN-1 (Sanz, L. (1119) 127)

Axial heterogeneity
Brush-border membrane; Phosphate transport; Sodium ion cotransport; (Renal cortex) (Loghman-Adham, M. (1105) 67)

Axonal transport
Isozyme; Isoform; Catalytic subunit, α; Retina (Specht, S.C. (1118) 77)

Lipid transport (Blum, J.J. (1125) 313)

5-Azacytidine
tRNA-guanine transglycosylase; Queuine; Queuosine; DNA methylation; Human tumor (Gündüz, U. (1139) 229)

Azidothymidine
UDP-glucuronosyltransferase; Enzyme inhibition; (Liver); (Human) (Herber, R. (1139) 20)

B

Bacillomycin
β-Hydroxy fatty acid; Surfactin; β-Amino fatty acid; Iturin; Mycosubtilin; (*B. subtilis*) (Besson, F. (1123) 51)

Bacterial cytotoxicity
Heterogeneous gas phase singlet oxygen generation (Midden, W.R. (1117) 216)

Bacterial expression
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Bacterial glycolipid
Hexosyl acylglycerol; Structural elucidation; Glycolipid; NMR, one-dimensional; NMR, two-dimensional; (*C. fuscus*) (Scherer, O.W. (1117) 42)

Bacterial membrane
NMR, ^{23}Na-; Potassium ion; Atomic absorption, K^+; Ion transport; Monensin; Ionic selectivity; (*S. faecalis*); (*E. hirae*) (Rabaste, F. (1108) 177)

Bacterial outer membrane protein
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Transport kinetics; Periplasmic binding protein; Transport mechanism; Membrane carrier; Asymmetric carrier; Transport model (Krupka, R.M. (1110) 11)

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Bacteriorhodopsin structure
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Betaine aldehyde
Radioenzymatic assay; NAD^+; Solubilized enzyme; Betaine (Zhang, J. (1117) 333)

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Biliary secretion
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Caged calcium
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Calcium ion accumulation; Calcium pump; ATPase, $(Ca^{2+} + Mg^{2+})$-; cyclic AMP; Quin2; Chlorotetracycline; (Human platelet) (Tao, J. (1105) 29)

Calcium ion extrusion; Calcium pump; ATPase, $(Ca^{2+} + Mg^{2+})$-; cyclic GMP; Quin2; Chlorotetracycline; (Human platelet) (Johansson, J.S. (1105) 40)

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Calcium ion spike
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Calcium ion accumulation; Calcium ion flux; ATPase, $(Ca^{2+} + Mg^{2+})$-; cyclic AMP; Quin2; Chlorotetracycline; (Human platelet) (Tao, J. (1105) 29)

Calcium ion extrusion; Calcium ion flux; ATPase, $(Ca^{2+} + Mg^{2+})$-; cyclic GMP; Quin2; Chlorotetracycline; (Human platelet) (Johansson, J.S. (1105) 40)

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Calgranulin B
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Calmodulin binding protein
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Calmodulin kinase II
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Carbohydrate combining site
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Carbohydrate specificity
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Cardiolipin synthase
Cardiolipin; *cls*; Phospholipid; Operon fusion; Gene fusion (Heber, S. (1129) 1)

Cardiomyopathy
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Carnitine
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α subunit; cDNA sequence; (Maize) (Dobrowolska, G. (1129) 139)

Casein kinase II
Calsequestrin; Myotube; Development; Sarcoplasmic reticulum; (Muscle) (Cala, S.E. (1118) 277)

Casein kinase II subunit α
genomic DNA sequence; Chromosome localization; (Human) (Wirkner, U. (1131) 220)

Casein kinase type II
Ribosomal acidic phosphoprotein; Phosphorylation, in vitro; (*D. discoideum*) (Prieto, J. (1115) 6)

Catalase
Superoxide dismutase; Glutathione peroxidase; Dipalmitoylphosphatidylcholine; Fetal development; (Human) (McElroy, M.C. (1117) 153)

Bromoperoxidase; Enzyme characterization; (*Pseudomonas*) (Itoh, N. (1122) 189)

Peroxisome; Differentiation; Protein blotting; (Rat ovary); (Pig ovary) (Peterson, S.L. (1135) 207)

Catalysis
Biological oxidation; Fermentation; Oxidative phosphorylation (Beinert, H. (1101) 125)

Catalytic domain
Protein kinase C-ϵ; Phorbol ester; Gene expression; Cloning (Basta, P. (1132) 154)

Catalytic efficiency
Enzyme kinetics; D-Amino acid oxidase; Enzyme mechanism; (*R. gracilis*) (Pollegioni, L. (1120) 11)

Catalytic mechanism
Amylase; Catalytic site; Site-directed mutagenesis; (*B. subtilis*) (Takase, K. (1122) 278)

Catalytic site
ATPase, F_1-; Endogenous nucleotide; ATP synthase, F_0F_1-; (*M. lysodeikticus*) (Mileykovskaya, E.I. (1099) 219)

F_1; ATPase F_1-; Tightly bound nucleotide; Non-catalytic site; 2-Azido-ATP (Hartog, A.F. (1100) 267)

Lanthanide binding; Fluorescein isothiocyanate; ATPase, Ca^{2+}-; Sarcoplasmic reticulum (Ivkova, M.N. (1118) 231)

Amylase; Site-directed mutagenesis; Catalytic mechanism; (*B. subtilis*) (Takase, K. (1122) 278)

Catalytic subunit
ATPase, H^+-; Brush-border membrane; Primary structure; (Kidney) (Sander, I. (1112) 129)

Catalytic subunit, α
Isozyme; Isoform; Retina; Axonal transport (Specht, S.C. (1118) 77)

Cataract
Hydrogen peroxide metabolism; Lens; Enzyme activity; GSH deficiency; Lipid peroxidase; (Human); (Rabbit); (Mouse) (Babizhayev, M.A. (1138) 11)

Calpain II; Lens; β-Crystallin (David, L.L. (1139) 210)

Cataractogenesis
Human lens; Aging; Fluorescence; Non-enzymatic glycation (Nagaraj, R.H. (1116) 34)

CAT assay
Nucleic acid sequence; Gene promoter; Transcriptional regulation; Proliferating Cell Nuclear Antigen (PCNA); (Rat) (Ohashi, Y. (1130) 175)

N-*myc* enhancer; S1 mapping; (Mouse) (Imamura, Y. (1132) 177)

Catecholamine-melanin
DOPA-melanin; Antioxidant; Cardiolipin; Lipid peroxidation; Melanin (Porębska-Budny, M. (1116) 11)

Catecholamine release, inhibition of
Tetanus toxin; Toxin binding; (Bovine adrenal chromaffin cell) (Colville, C.A. (1137) 264)

Catechol-*O*-methyltransferase
Bacterial expression; Active recombinant protein; Protein purification; (*E. coli*) (Lundström, K. (1129) 149)

Cation / anion effect
ATPase-F_1-; Plant mitochondrial ATPase; ATPase, $(Ca^{2+} + Mg^{2+})$-; Inhibitor; Nucleotide specificity (O'Rourke, J.F. (1098) 224)

Cation binding site
Ruthenium red; Intrinsic fluorescence; ATPase, Ca^{2+}-; Sarcoplasmic reticulum (Moutin, M.-J. (1100) 321)

Cationic liposome
Protein kinase C; Transfection; Liposome (Farhood, H. (1111) 239)

Antibody-polylysine conjugate; DNA delivery; Transfection; Endothelial cell (Trubetskoy, V.S. (1131) 311)

Cationized bovine serum albumin
Blood-brain barrier; Liposome; Mannopyranoside; Sulfatide (Micklus, M.J. (1124) 7)

Cation selectivity
Sodium pump; Current-voltage dependence; Cation stimulation; (*Xenopus* oocyte) (Omay, H.S. (1104) 167)

Cation stimulation
Sodium pump; Current-voltage dependence; Cation selectivity; (*Xenopus* oocyte) (Omay, H.S. (1104) 167)

Cation uptake
Vesicle; Fluorescent dye; Lipophilic cation; (*E. coli*) (Sedgwick, E.G. (1099) 51)

Cβ catalytic subunit
cyclic AMP-dependent protein kinase; cDNA; Expression; (Mammalian cell and tissue); (Rat brain) (Shuntoh, H. (1131) 175)

CD
Polyene antibiotic; Filipin; Dimyristoylphosphatidylcholine; Fluorescence probe; Carboxyfluorescein; Calcein; Permeabilization; Model membrane; Light scattering (Milhaud, J. (1105) 307)

ATPase, Ca^{2+}-; Lipid–protein interaction; Temperature adaptation; Intrinsic tryptophan fluorescence; Fluorescence; FTIR (Vrbjar, N. (1107) 1)

CD4
PMA; Tyrosine kinase; Protein tyrosine kinase; Receptor internalization (Yoshida, H. (1137) 321)

HIV-1; Glycoprotein; Dextran sulfate; Receptor binding (Mbemba, E. (1138) 62)

CD9
Thrombosis; Calcium; Glycoprotein; Phospholipase C (Kroll, M.H. (1137) 248)

CD25 (IL-2-Rα) expression
HIV-infected monocytic cell; Secretory product; PHA-activated human PBMC (Célérier, J. (1139) 300)

CD46
Syncytiotrophoblast; Platelet; Kidney; Glycosylation; Lectin (Vanderpuye, O.A. (1121) 301)

cdc8
Cell cycle; dTMP kinase; (Yeast) (Abaigar, L.T. (1132) 222)

CDP-choline
Cholinephosphotransferase; Photoaffinity labeling; (Rat liver) (Ishidate, K. (1124) 36)

C / EBP
Gene expression; Hyperlipidemia; Hypolipidemic drug; Transcription factor (Staels, B. (1123) 227)

Cecropin B
cDNA cloning; Nucleotide sequence; (*Bombyx mori*) (Taniai, K. (1132) 203)

Cefaclor
β-Lactam; Cephalosporin; Caco-2; Peptide transport; (Human intestine) (Dantzig, A.H. (1112) 167)

β-cell
ATP-sensitive K-channel; Sulfonylurea; Diazoxide; Protein phosphorylation (Niki, I. (1133) 95)

Cell adhesion
Tyrosine phosphorylation; Biliary-glycoprotein; Protein kinase C (Afar, D.E.H. (1134) 46)

Cell aging
Calcium ion; Nuclear magnetic resonance; (Human erythrocyte) (Aiken, N.R. (1136) 155)

Cell–cell interaction
Fibroblast; Lymphoblast; Lysosomal enzyme (Di Natale, P. (1138) 143)

Cell culture
Amino acid transport; Muscle; Myotube; System L; Leucine (Yeh, J.-y. (1108) 1)

Insulin; Cytochalasin B; Sugar transport; Phloretin; Phlorizin; (LLC-PK_1 cell) (Miller, J.H. (1110) 209)

Growth inhibitor; Serum; (Rabbit) (Kimura, T. (1118) 239)

Base-exchange; Phospholipid; Phosphatidylserine (Richardson, U.I. (1127) 99)

Skin; Epidermal cell; Collagen (Ohkura, K. (1133) 153)

Chloride channel; Chloride transport; Cystic fibrosis; Keratinocyte (Kansen, M. (1139) 49)

Cell cycle
Differentiation; Protein kinase (Michaelis, C. (1132) 35)

cdc8; dTMP kinase; (Yeast) (Abaigar, L.T. (1132) 222)

Interferon α; (Daudi cell) (Bybee, A. (1137) 73)

Cell death
Calcium; Cytotoxicity; Lipid peroxidation; Lipoprotein; (Lymphoid cell line) (Nègre-Salvayre, A. (1123) 207)

Apoptosis; DNA fragmentation; Hydroxyurea; Burkitt's lymphoma (Johnson, C.A. (1136) 1)

Cell detachment
Cartilage; Chromium release; Autoantibody; Complement (Mettal, D. (1138) 85)

Cell differentiation
Iron; Transferrin receptor; Ferritin; Macrophage (Iturralde, M. (1133) 241)

Arachidonic acid turnover; 1,25-Dihydroxyvitamin D-3; 24,25-Dihydroxyvitamin D-3; Chondrocyte; Phospholipase A_2 (Swain, L.D. (1136) 45)

Fibronectin; Integrin; Fibronectin alternative splicing; Muscle; Myogenesis; mRNA; Polymerase chain reaction (Steffensen, B. (1137) 95)

Cell-free transfer
NADH; Golgi apparatus; Plasma membrane; Ascorbic acid; (Rat liver) (Rodriguez, M. (1107) 131)

Cell growth
Keratinocyte; NADH oxidase; Cell immortalization; (Human) (Morré, D.J. (1134) 217)

Cell morphology; DNA synthesis; HeLa cell; Normal human gingival fibroblast; Static magnetic field (Sato, K. (1136) 231)

Cell immortalization
Keratinocyte; Cell growth; NADH oxidase; (Human) (Morré, D.J. (1134) 217)

Cell injury
Mitochondrial pore; Cyclosporin A; Cyclophilin (Crompton, M. (1101) 214)

Cell killing
Cytoplasmic free calcium; Photodynamic therapy; Phthalocyanine; Hematoporphyrin derivative; Calcium chelator; (Bladder carcinoma cell); (CHO cell) (Penning, L.C. (1107) 255)

Cell line
α_2-Adrenoceptor subtype; Stable transfection; [^{3}H]Rauwolscine binding; Adenylate cyclase activity; RNAase protection assay (Marjamäki, A. (1134) 169)

Skeletal muscle; Myocyte; Dihydropyridine receptor; α-Bungarotoxin receptor; Ion channel (Caviedes, R. (1134) 247)

P-glycoprotein; Multidrug resistance (Nielsen, D. (1139) 169)

Cell-mediated immunity
Mitochondrion; Hepatocyte; Dexamethasone; Nude rat; (*F. hepatica*) (Hanisch, M.J.E. (1139) 196)

Cell membrane
Phospholipase D; Substrate specificity; Liver; Phosphatidylinositol (Heller, M. (1109) 109)

Platelet; Insulin therapy; Insulin-dependent diabetes mellitus; Gestational diabetes mellitus (Mazzanti, L. (1139) 65)

Cell membrane protein
Scatter factor; Affinity purification; Receptor; (MDCK cell) (Joseph, A. (1105) 141)

Cell migration
Phospholipase A_2; A7r5; Chemotaxis; Chemokinesis; (Rat smooth muscle cell) (Kanemasa, T. (1125) 210)

Cell morphology
Cell growth; DNA synthesis; HeLa cell; Normal human gingival fibroblast; Static magnetic field (Sato, K. (1136) 231)

Cell motility
Scatter factor; Glycosylation (Hofmann, R. (1120) 343)

Cellobiose oxidase
Cellobiose:quinone oxidoreductase; Proteolysis; (*P. chrysosporium*) (Wood, J.D. (1119) 90)

Cellobiose:quinone oxidoreductase
Cellobiose oxidase; Proteolysis; (*P. chrysosporium*) (Wood, J.D. (1119) 90)

Cell partitioning
Dextran; Poly(ethylene glycol); Erythrocyte; (Rat) (Walter, H. (1105) 221)

Cell permeability
Cell signalling; Extracellular ATP; Phospholipase C activation (El-Moatassim, C. (1134) 31)

Cell permeabilization
GTP-binding protein; Secretion; PC12 cell; (Rat) (Yang, Y.C. (1134) 285)

Cell proliferation
Sodium ion/proton antiport system; Urine acidification; Amiloride; Intracellular pH regulation; pH regulation; Sodium ion transport (Viniegra, S. (1106) 99)

Lipoxygenase activity; Ursolic acid (Simon, A. (1125) 68)

Apoptosis; Di- and polyamine γ-glutamyl derivative; Retinoic acid (Piacentini, M. (1135) 171)

TGF-β_1; Protein kinase C; Inhibition of proliferation; Adenocarcinoma; Breast cancer; (Human breast) (Guerrin, M. (1137) 116)

Cell signalling
Potassium/sodium/chloride cotransporter; Ion transport; Kidney; A6 cell (Fan, P.Y. (1111) 75)

Extracellular ATP; Phospholipase C activation; Cell permeability (El-Moatassim, C. (1134) 31)

Cell size
Potassium ion; Vacuole; Photodynamic treatment; Toluidine blue; Yeast; (*K. marxianus*) (Paardekooper, M. (1108) 86)

Cell-specific expression
Nucleotide synthesis; Phosphoribosyl pyrophosphate synthetase; Ribose-phosphate pyrophosphokinase; Promoter region; Housekeeping gene; (Human) (Ishizuka, T. (1130) 139)

Cell spreading
Vitronectin; Species specificity; Deglycosylation; Ferguson plot (Nakashima, N. (1120) 1)

Cell surface
Gene expression; Homeobox; *Hox-3.3*; Aqueous two-phase system; Transfection; (Mouse) (Shimeld, S.M. (1136) 253)

Cell transit time analysis
Erythrocyte; Shape transformation; Calcium ion dependence (Rendell, M. (1133) 293)

Cellular adhesion
Extracellular matrix; Proteoglycan; Chondroitin sulfate; (Hemopoietic stem cell) (Shirota, T. (1136) 17)

Cellular drug resistance
Anthracycline; Daunomycin; Drug sensitivity; Leukemia cell P388 (Ferrer-Montiel, A.V. (1104) 111)

Cellular hydrogen peroxide
Free radical; Hydrogen peroxide; Nitroxide free radical; (Human tumor cell) (Voest, E.E. (1136) 113)

Cellular methylation
Testosterone; Ornithine decarboxylase induction; Renal hypertrophy; *S*-Adenosylmethionine; *S*-Adenosylhomocysteine; *S*-Adenosylmethionine synthetase; Transsulfuration pathway (Manteuffel-Cymborowska, M. (1116) 166)

Cellular phosphate
Phosphate transport; Skeletal muscle cell; Phosphorus-32 labelling (Kemp, G.J. (1137) 10)

Cellular retinol binding protein
Retinol; Retinal; Retinoic acid; Microsome; Dehydrogenase (Napoli, J.L. (1120) 183)

Cellular senescence
Density separation; Erythrocyte; Deformability; Band 4.1; Complement receptor 1; Decay accelerating factor (Lutz, H.U. (1116) 1)

Cellular slime mold
ras gene; Proto-oncogene; Developmental regulation (Robbins, S.M. (1130) 85)

Cellular spin resonance
Electrorotation; Spin resonance; Electric property; Dielectric spectroscopy; (Yeast) (Hölzel, R. (1104) 195)

Cell volume
Renal medulla; Potassium ion efflux; (Rat) (Law, R.O. (1107) 186)

Light scattering; NBD-glucosamine; Epstein-Barr virus (Rauchman, M.I. (1111) 231)

Amino acid; Renal inner medulla (Law, R.O. (1133) 268)

Chloride current; P-glycoprotein; Epithelial cell; Patch-clamp (Rasola, A. (1139) 319)

Cell volume regulation
Exocytosis; Osmotic swelling (Okada, Y. (1107) 201)

Cell water
Attached cell; Hyposmosis; Potassium ion channel; Regulatory volume change (Ikehara, T. (1111) 151)

Central nervous system
Acetylcholine receptor; Excitatory neurotransmission; Gene cloning; Evolution; (*D. melanogaster*) (Gundelfinger, E.D. (1137) 299)

Cephalosporin
β-Lactam; Cefaclor; Caco-2; Peptide transport; (Human intestine) (Dantzig, A.H. (1112) 167)

Cephalosporin acylase
γ-Glutamyltranspeptidase; Gene structure; Recombinant DNA (Ishiye, M. (1132) 233)

Ceramide
Retinoic acid; Sphingomyelin; Sphingosine; (GH_4C_1 cell) (Kalén, A. (1125) 90)

Ceramide disaccharide
Mannolipid; Glycolipid antigen; Crustacean mannolipid; (*H. shlegelii*); (*E. superba*); (*M. nipponense*) (Itonori, S. (1123) 263)

Cerebral aneurysm
Collagen; Skin fibroblast culture; Blood vessel (Majamaa, K. (1138) 191)

Cerebrocortical nerve ending
Sodium–calcium ion exchanger; Voltage sensitivity; Calcium ion channel; Intracytosolic calcium ion; Calcium ion, intracytosolic; Aging (Canzoniero, L.M.T. (1107) 175)

Cerebroside
Peripheral nerve; Spinal cord; Myelin; Phospholipid; Fatty acid (Svennerholm, L. (1128) 1)

Ceruloplasmin
Gene expression; Liver; Lung; Organ development; Premature delivery; (Guinea-pig) (Bingle, C.D. (1139) 217)

CF_0CF_1 subunit
Photophosphorylation; Crosslinking; ATPase, H^+-; Chloroplast (Beckers, G. (1101) 97)

c-*fos*
Hepatocyte; AT_1-receptor; Proto-oncogene; Angiotensin II receptor; Phorbol ester (González-Espinosa, C. (1136) 309)

α-Chaconine
Glycoalkaloid; α-Solanine; α-Tomatine; Sterol; LUV (Keukens, E.A.J. (1110) 127)

Chain elongation
Elongation factor; Alkaloid; Inhibition; (Cephalotaxus) (Tujebajeva, R.M. (1129) 177)

Channel
VDAC modulator; Membrane permeability; Mitochondrion; Respiration control; Membrane permeability (Liu, M.Y. (1098) 255)

α-Latrotoxin; Pore size; Cluster structure (Krasilnikov, O.V. (1112) 124)

Channel activity
Colicin A; Translocation, envelope; Membrane protein; Toxin (Letellier, L. (1101) 218)

Channel density
Sodium ion channel; Current kinetics; Single-channel current; Amiloride blocker-noise; (Crab-epithelium) (Zeiske, W. (1105) 245)

Channel gating
Carboxyfluorescein release; Peptide–lipid interaction (Schwarz, G. (1110) 97)

Channel inactivation
Gramicidin; Sterol; Red blood cell membrane; Lipid bilayer (Schagina, L.V. (1109) 91)

Channel selectivity
Amphotericin B; Cholesterol complex; Molecular mechanics; Channel structure; Permeability (Khutorsky, V.E. (1108) 123)

Channel structure
Amphotericin B; Cholesterol complex; Molecular mechanics; Permeability; Channel selectivity (Khutorsky, V.E. (1108) 123)

Chaperone
NADH : ubiquinone oxidoreductase; Complex I; Assembly; (*N. crassa*); (*E. coli*); (*A. niger*) (Weidner, U. (1101) 177)

Protein kinase; Tyrphostin; Galactosylsphingosine (psychosine); Monomethyl sphingosine; Dimethylsphingosine (Abdel-Ghany, M. (1137) 349)

Chaperonin
Bovine liver rhodanese; Recombinant rhodanese; Protein purification; Protein expression; Protein folding; (*E. coli*) (Miller, D.M. (1121) 286)

Characterization
ATPase, Cl^--; Anion pump; Chloride translocation; Reconstitution (Ohhashi, T. (1106) 165)

Charge density
Transport; Proton pump; Membrane (Sitaramam, V. (1098) 336)

Charge recombination
Chlorophyll *a* fluorescence lifetime; Proton gradient; Fluorescence quenching; Photosystem II; Photosynthesis (Krieger, A. (1102) 167)

Charge separation
Diffusion potential; Electrochromic absorbance change; Fluorescence; Thylakoid membrane (Dau, H. (1098) 49)

Long-wavelength antenna; Antenna; Bacteriochlorophyll; Energy transfer; Low temperature efficiency; (*H. chlorum*, *Rps. viridis*) (Kleinherenbrink, F.A.M. (1099) 175)

Photosynthesis; Water oxidation; Salt effect; (*Synechococcus*) (Pauly, S. (1099) 203)

Diffusion potential; Fluorescence; Free energy; Picosecond; Thylakoid membrane; Time-resolved spectroscopy (Dau, H. (1102) 91)

Charge-shift electrophoresis
Lipase; N-terminal amino acid sequence; (*P. aeruginosa*) (Jaeger, K.-E. (1120) 315)

Charge-transfer complex
Monolayer; Plastoquinone; α-Tocopherol quinone; Monogalactosyldiacylglycerol (Kruk, J. (1112) 19)

Charybdotoxin
Erythrocyte; Sickle cell; Deformation; Ektacytometer; Calcium ion-activated potassium ion channel; Potassium ion channel; Gardos channel (Johnson, R.M. (1107) 314)

Chemical modification
Bile acid transport; Photoaffinity labeling; Ileum; Small intestine; (Rabbit) (Kramer, W. (1111) 93)

Sea anemone; Cytolysin; Tryptophan (Turk, T. (1119) 1)

Sea anemone; Cytolysin; Biological activity (Turk, T. (1119) 5)

Bilirubin binding; Bovine serum albumin; Fluorescence quenching (Mir, M.M. (1119) 261)

17β-Hydroxysteroid dehydrogenase; Essential amino acid residue; (Mouse liver) (Nakayama, T. (1120) 144)

GSTπ; Pyridoxal 5′-phosphate; Active site lysine; (Human placenta) (Lo Bello, M. (1121) 167)

Cyclomaltodextrin glucanotransferase; Cyclizing activity (Mattsson, P. (1122) 33)

Chemical synthesis of RNA
Ribonuclease III; RNA processing; Bacteriophage T7 (Nicholson, A.W. (1129) 318)

Chemiluminescence
Superoxide; Vitamin E; Vitamin C; Liposome (Gotoh, N. (1115) 201)

Acetaldehyde; Soybean seedling; Hydrogen peroxide; Hydroperoxy intermediate; Emission spectrum (Watanabe, H. (1117) 107)

Chemiluminescence-HPLC
Hydroperoxide specific assay; Phosphatidylcholine hydroperoxide; Phytoalexin induction; (Soybean) (Kondo, Y. (1127) 227)

Chemokinesis
Phospholipase A_2; Cell migration; A7r5; Chemotaxis; (Rat smooth muscle cell) (Kanemasa, T. (1125) 210)

Chemoreception
Calcium ion efflux; Lithium (Wright, M.V. (1107) 223)

Chemosensitizer
P-glycoprotein; Glycoprotein; Colchicine transport; Vinblastine transport; Plasma membrane; Multidrug resistance; (CHO cell) (Doige, C.A. (1109) 161)

Chemotaxis
Methylesterase; Substrate-assisted catalysis; Di-isopropylfluorophosphate; Active-site serine (Krueger, J.K. (1119) 322)

Phospholipase A_2; Cell migration; A7r5; Chemokinesis; (Rat smooth muscle cell) (Kanemasa, T. (1125) 210)

12-Lipoxygenase; Icosanoid; Inflammation; Carbonyl derivative (Naccache, P.H. (1133) 102)

Chick embryo
Heart cell; Intracellular calcium; Sodium pump; Cardiac glycoside (Ahlemeyer, B. (1136) 91)

Chloride
Iodide; Oxygen evolution; Photosystem II; Thermoluminescence; (Pokeweed thylakoid) (Rashid, A. (1101) 303)

Potassium ion; Transient; Electrical transient; (Toad bladder) (Gordon, L.G.M. (1108) 8)

Chloride–base exchange
pH, intracellular; Enterocyte (Calonge, M.L. (1103) 45)

Chloride–bicarbonate exchange
Basolateral membrane; Membrane vesicle (Orsenigo, M.N. (1108) 140)

Chloride channel
Airway epithelium; Mole fraction; Cystic fibrosis; Ion permeation (Wilk-Blaszczak, M.A. (1104) 160)

Patch-clamp; Endothelial cell; Cooperative gating (Queyroy, A. (1108) 159)

5-Nitro-2-(-3-phenylpropylamino)benzoic acid; Choride transport; Intestinal secretion; Nonspecific effect (Keeling, D.J. (1115) 42)

Electroplax; Ion transport; Voltage-gated; (*Torpedo californica*) (O'Neill, G.P. (1129) 131)

Chloride transport; Cystic fibrosis; Keratinocyte; Cell culture (Kansen, M. (1139) 49)

Chloride ($^{36}Cl^-$) efflux
Osmotic cell swelling; Chloride current; Whole-cell patch clamp; Patch clamp; Volume regulation; (Human keratinocyte) (Rugolo, M. (1112) 39)

Chloride current
Osmotic cell swelling; Chloride ($^{36}Cl^-$) efflux; Whole-cell patch clamp; Patch clamp; Volume regulation; (Human keratinocyte) (Rugolo, M. (1112) 39)

Cell volume; P-glycoprotein; Epithelial cell; Patch-clamp (Rasola, A. (1139) 319)

Chloride dependence
Taurine transport; Placental membrane vesicle (Moyer, M.S. (1109) 74)

Chloride flux
Indacrinone; Cobalt; (Amphibian skin) (Beaujean, V. (1104) 174)

Chloride / proton symport
Brush-border membrane; Potassium ion/proton antiport; pH regulation; Proton flux; Pyranine; (Guinea-pig ileum) (Vasseur, M. (1107) 150)

Chloride secretion
Vanadium; Prostaglandin; Intestinal electrolyte transport; Colon (Plass, H. (1107) 139)

Chloride translocation
ATPase, Cl^--; Anion pump; Reconstitution; Characterization (Ohhashi, T. (1106) 165)

Chloride transport
Yeast; Vacuolar acidification; Protonmotive force; pH (Wada, Y. (1101) 296)

Band 3 protein; Anion transport; cDNA; (Mouse erythroid); (*Xenopus* oocyte) (Lepke, S. (1106) 13)

Human skin fibroblast; Cystic fibrosis; Membrane vesicle (Vasseur, M. (1139) 41)

Chloride channel; Cystic fibrosis; Keratinocyte; Cell culture (Kansen, M. (1139) 49)

***p*-Chloromercuribenzene sulfonate**
Erythrocyte membrane; Anion transport; Stopped flow (Zhang, Z.-h. (1106) 31)

Chlorophyll
Spectroscopy; Antenna; Photosynthesis (Hemelrijk, P.W. (1098) 159)

EPR; Radical pair state; Plastoquinone; Photosynthesis; Photosystem II preparation (Van Mieghem, F.J.E. (1100) 198)

Photosystem I; Fluorescence; Reaction center; Energy transfer; Photosynthesis (Iwaki, M. (1100) 278)

Antenna; Photosystem II; Polarized light spectroscopy; Pump-probe spectroscopy (Kwa, S.L.S. (1101) 143)

Antenna; Light harvesting complex; Photosystem II; Plant photosynthesis; Pump-probe spectroscopy; Ultrafast spectroscopy (Kwa, S.L.S. (1102) 202)

Chlorophyll *a*
Photosystem I; Photosystem II; Thylakoid membrane; (*P. sativum*) (Bose, S. (1098) 351)

Chlorophyll *a'*
Photosystem I; Reaction center; HPLC (Maeda, H. (1099) 74)

Green sulfur bacterium; Pigment analysis; Primary electron acceptor; Bacteriochlorophyll 663 (Van de Meent, E.J. (1102) 371)

Chlorophyll *a* fluorescence
Bicarbonate effect; Binding species; Photosystem II; Formate/formic acid binding; Q_A^- reoxidation; (*S. oleracea*) (Xu, C. (1098) 32)

Chlorophyll *a* fluorescence lifetime
Proton gradient; Fluorescence quenching; Photosystem II; Photosynthesis; Charge recombination (Krieger, A. (1102) 167)

Chlorophyll *b*
Light harvesting complex; Photosystem I; Photosystem II; (*P. hollandica*); (Prochlorophytes); (Oxychlorobacteria) (Van der Staay, G.W.M. (1102) 220)

Chlorophyll c_2
Linear dichroism; Pigment orientation; Light harvesting complex; Photosystem I; (*Chroomonas* CS 24) (Hiller, R.G. (1102) 360)

Chlorophyll-protein complex; Light-harvesting complex; Fucoxanthin; Linear dichroism; (*P. lutherii*); (*P. tricornutum*) (Hiller, R.G. (1102) 365)

Chlorophyll fluorescence
Phycobilisome; Photosystem II; Cyanobacterium; Energy transfer (Bittersmann, E. (1098) 105)

Heat stress; Temperature dependence; (Leaf) (Nauš, J. (1101) 359)

Light harvesting complex; Photosynthesis; Thylakoid; Photosystem II; Chloroplast (Ruban, A.V. (1102) 30)

Photosynthesis; Chloroplast; Light harvesting complex; Thylakoid; Photosystem II (Ruban, A.V. (1102) 39)

Chlorophyll fluorescence decay
Photosystem II; Electron acceptor complex; Herbicide resistance; D1 mutant; (*Chlamydomonas reinhardtii*) (Govindjee, (1101) 353)

Chlorophyll protein
Light-cold stress; Photoinhibition; Protein phosphorylation; Subfractionation; Thylakoid membrane fluidity (Carlberg, I. (1099) 111)

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Chlorophyll-protein complex
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Cholesterol mass
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Cholesteryl ester hydrolysis
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Choline transport system
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Chondroitin 6-sulfotransferase
Chondroitin 4-sulfotransferase; Sulfotransferase secretion; Monensin; (Chick chondrocyte) (Habuchi, O. (1133) 9)

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Nicotinamide nucleotide transhydrogenase; Enzyme activation; (*R. capsulatus*) (Palmer, T. (1099) 157)

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Chromogranin B
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Chylomicron remnant
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Collagen type X
Collagen type VIII; Human neutrophil elastase (Kittelberger, R. (1139) 295)

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Pancreatic phospholipase A_2; 2-Acylaminophospholipid; Light scattering; Time resolved fluorescence spectroscopy (Deveer, A.M.T.J. (1126) 95)

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Complex glycosphingolipid
Complex ganglioside; Oligosialoganglioside; (Human brain) (Miller-Podraza, H. (1124) 45)

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*Eco*RI endonuclease; Footprinting; High pressure; Noncovalent interaction (Macgregor, Jr., R.B. (1129) 303)

Conformational state
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CP47
Photosystem II; CP43; Reaction center; Photoinhibition; Chlorophyll protein; Thylakoid membrane (Mori, H. (1100) 293)

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Creatine; NMR, ^{1}H-; NMR, ^{31}P- (Unitt, J.F. (1133) 115)

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Phosphocholine; NMR; (*B. japonicum*) (Rolin, D.B. (1116) 215)

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Cyclomaltodextrin glucanotransferase
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Cyclopentanoid lipid
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Cyclosporin A
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Cyclosporin binding protein
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Cystic fibrosis transmembrane conductance regulator
Cystic fibrosis; Membrane transport (Riordan, J.R. (1101) 221)

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Hydrogen exchange; NMR; (*Pseudomonas*) (Timkovich, R. (1121) 8)

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Cytochrome *c* oxidase; Heparin (Antalík, M. (1100) 155)

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Gene transcription; Cytochrome *c* oxidase; (Yeast) (Poyton, R.O. (1101) 252)

Cytochrome *f*; Electron transfer; Plastocyanin (Modi, S. (1102) 85)

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Cytochrome *c*; Heparin (Antalík, M. (1100) 155)

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Gene transcription; Cytochrome *c*; (Yeast) (Poyton, R.O. (1101) 252)

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Cytochrome-*c* oxidase, aa_3
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Cytochrome *c*; Electron transfer; Plastocyanin (Modi, S. (1101) 64)

Cytochrome *c*; Electron transfer; Plastocyanin (Modi, S. (1102) 85)

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Cyanide binding; E state; Peroxy state; Ferryl state (Mitchell, R. (1100) 40)

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Cytochrome $P\text{-}450_{cam}$
Hydrogen bond; Amino acid substitution; Energy minimization (Yoshikawa, K.-i. (1122) 41)

Icosanoid; Metabolism; Rat liver microsome; Epoxygenase (Jajoo, H.K. (1123) 110)

HPLC; Amino acid sequence; Fatty acid ω-hydroxylase; Rat kidney microsome; (Human kidney microsome) (Kawashima, H. (1123) 156)

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Cyanide; Cytochrome b_5; Fatty acid desaturation; (Desaturase, *M. domestica*) (Pierce, S. (1125) 268)

Cytochrome $P\text{-}450_{17\alpha}$
17α-Hydroxylase deficiency; 17,20-Lyase deficiency; 17α-Hydroxylase; Congenital adrenal hyperplasia (Yanase, T. (1139) 275)

Cytochrome $P\text{-}450_{17\alpha,lyase}$
Steroidogenesis; Ovarian microsome; Androstenedione; Successive reaction (Yamazaki, T. (1125) 335)

Icosapentaenoic acid; Reproduction; Prostaglandin E_3; GC-MS (Oliw, E.H. (1126) 261)

P-450IIIA family; *P*-450HFLa; Gene regulation; DNA binding protein; (Fetal liver) (Itoh, S. (1130) 133)

cDNA cloning; Gene expression; (Monkey) (Komori, M. (1131) 23)

Androgen synthesis; Primary cell culture; Bovine adrenal; Steroidogenesis (Yamazaki, T. (1134) 143)

Cytochrome *P*-450 2B1/B2
Cytochrome *P*-450 2E1; Pyrazole induction; 4-Methylpyrazole induction; Time course of induction (Winters, D.K. (1117) 15)

Cytochrome *P*-450 2E1
Cytochrome *P*-450 2B1/B2; Pyrazole induction; 4-Methylpyrazole induction; Time course of induction (Winters, D.K. (1117) 15)

Cytochrome P450IIB4
Liposome; Membrane partition; *S*-(−)-Nicotine; *N*,*N*-Diethylaniline; Fluorescence quenching (Vermeir, M. (1107) 93)

Cytochrome *P*-450 oxidation
Fungal biosynthesis; Essential fatty acid; Mass spectrometry; Arachidonic acid; Fatty acid oxidation; (*G. graminis*) (Brodowsky, I.D. (1124) 59)

Cytochrome *P*-450 (P-450IIIa)
cDNA sequence; Dexamethasone; Cloning; Induction; (Mouse liver) (Yanagimoto, T. (1130) 329)

Cytochrome *P*-450 substrate recognition
Lanosterol side chain; Lanosterol 14α-demethylase; Lanosterol derivative; (Yeast microsome) (Aoyama, Y. (1122) 251)

Cytodifferentiation
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Cytokine
β-Galactoside binding protein; Negative growth factor; Glycan association; Oligomeric state (Wells, V. (1121) 239)

Interleukin-1; Chondrocyte activating factor; Synoviocyte; Neutral metalloproteinase; Receptor antagonist (Bandara, G. (1134) 309)

Cytolysin
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Sea anemone; Tryptophan; Chemical modification (Turk, T. (1119) 1)

Sea anemone; Chemical modification; Biological activity (Turk, T. (1119) 5)

Cytolysis
HIV; AIDS; Hemolysis; Virus; HIV glycoprotein 41 000 (gp41) (Mobley, P.W. (1139) 251)

Cytoplasmic calcium
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Cytoplasmic pH
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Cytoplasmic potassium inhibition
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Cytoplasmic sodium activation
ATPase, Na^+/K^+-; Cytoplasmic potassium inhibition; Potassium ion, cytoplasmic; Allosteric effect; Sodium ion–sodium ion exchange (Cornelius, F. (1108) 190)

Cytoplasmic tail
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Cytoskeletal protein
Cholesterol exchange; Erythrocyte; Red blood cell; HDL; Membrane lipid; Membrane protein (Gold, J.C. (1111) 103)

Cytoskeleton
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D

$\Delta\tilde{\mu}_{H^+}$
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$\Delta\tilde{\mu}^{+}_{Na}$
ATP synthesis; Sodium bioenergetics; Decarboxylation phosphorylation; Protonmotive force; $\Delta\tilde{\mu}_{H^+}$ (Dimroth, P. (1101) 236)

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Density separation; Erythrocyte; Band 4.1; Complement receptor 1; Decay accelerating factor; Cellular senescence (Lutz, H.U. (1116) 1)

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Denaturation intermediate
Glucose-6-phosphate dehydrogenase; Denaturation; Guanidine hydrochloride; Enzyme conformation (Plomer, J.J. (1122) 234)

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Deoxyribonuclease
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Deoxyribonucleoside
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Fatty acid oxidation; Clofibrate; Δ^6-Desaturase; (Rat hepatocyte) (Grønn, M. (1123) 170)

Δ^6-Desaturase
α-Linolenic acid; Stearidonic acid; Fatty acid, $n-3$; Plasma lipid; Fatty acid composition; (Rat liver) (Yamazaki, K. (1123) 18)

Fatty acid oxidation; Clofibrate; Δ^5-Desaturase; (Rat hepatocyte) (Grønn, M. (1123) 170)

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Fatty acid oxidation; Icosapentaenoic acid; Docosahexaenoic acid; (Rat hepatocyte) (Grønn, M. (1125) 35)

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Desensitization
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Self-association; Equilibrium sedimentation; (Kangaroo insulin); (Chicken insulin) (Jeffrey, P.D. (1119) 107)

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Detergent solubilisation
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Detergent solubilization
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α_2-HS-glycoprotein; Fetuin; Gene regulation; mRNA (Yang, F. (1130) 149)

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Developmental change
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Dextran
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Phospholipase C, PC-, PI-; Arachidonic acid release; Exogenous phospholipase C; (HeLa cell) (Schiess, K. (1137) 82)

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Diacylglycerol; Inositol phospholipid; Phosphatidic acid; Signal transduction; (*Triticum aestivum* L.); (Plant plasma membrane) (Lundberg, G.A. (1123) 177)

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***N,N*-Diethylaniline**
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Diethylstilbestrol
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Catalase; Peroxisome; Protein blotting; (Rat ovary); (Pig ovary) (Peterson, S.L. (1135) 207)

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Poly(ADPR)polymerase; Expression; Proliferation; bFGF; NGF; (Rat astrocyte); (Rat neuron) (Chabert, M.G. (1136) 196)

Diffusion
Oxygen evolution; Kinetics; Oxygen electrode; Numerical analysis (Lavorel, J. (1101) 33)

Hydrogen ion; Mucus; Permeability; (In vitro study) (Desai, M.A. (1116) 43)

Diffusion potential
Charge separation; Electrochromic absorbance change; Fluorescence; Thylakoid membrane (Dau, H. (1098) 49)

Charge separation; Fluorescence; Free energy; Picosecond; Thylakoid membrane; Time-resolved spectroscopy (Dau, H. (1102) 91)

α-Difluoromethylornithine
Polyamine; Spermidine; Spermine; Putrescine; Polyamine transport; HTC cell; DH23b cell; Polyamine feedback; Polyamine toxicity; Ornithine decarboxylase overproducer (Mitchell, J.L.A. (1136) 136)

Digital imaging microscopy
Ouabain; Intracellular sodium ion; ATPase, Na^+/K^+-; Sodium pump; (Chick-embryo heart cell) (Ahlemeyer, B. (1137) 135)

Diglyceride kinase
Diacylgylcerol; Phosphatidic acid; Phosphatidylcholine; Phosphoinositide; Phosphocholine; Rat pancreas (Rubin, R.P. (1133) 127)

Dihydrolipoamide acetyltransferase
Pyruvate dehydrogenase complex; Molecular evolution (Matuda, S. (1131) 114)

Dihydrolipoyltransacetylase
Pyruvate dehydrogenase complex; Protein engineering; Purification; Electron microscopy (Schulze, E. (1120) 87)

Dihydrolipoyl transacylase
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(±)-5,6-Dihydro-6-phenyl-2-*n*-alkyl-imidazo[2,1-*b*]thiazole
Fluorescence quenching; 8-(2-Anthryl)octanoic acid; Partition coefficient; Large unilamellar liposome (Vermeir, M. (1104) 63)

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3α,7α-Dihydroxy-5β-cholestane
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Dihydroxybenzoate
Hydroxyl radical; Site specificity; Free radical; Salicylate; Phenylalanine (Gelvan, D. (1116) 183)

3,4-Dihydroxybutyl-1-phosphonate
Phosphatidylglycerol phosphate; *pgsA*; Divalent cation; Polyamine (Ke, L. (1128) 250)

(*S*)-3,4-Dihydroxybutyl-1-phosphonate
(*sn*)-Glycerol-3-phosphate acyltransferase; (*S*)-3-Hydroxy-4-oxobutyl-1-phosphonate; 4-Hydroxy-3-oxobutyl-1-phosphonate; 1,3,4-Trihydroxybutyl-1-phosphonate (Stein, T.A. (1123) 249)

5,6-Dihydroxyindole
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3,4-Dihydroxyphenylalanine
Aromatic L-amino acid decarboxylase; Isoelectric focusing; (Bovine); (Human) (Nasrin, S. (1118) 318)

1,25-Dihydroxyvitamin D-3
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Brush-border membrane vesicle; Calcium ion transport; Pseudo vitamin D deficiency; Rickets (Kaune, R. (1109) 187)

T lymphocyte; Calcium ionophore; Phorbol ester (Zilberman, Y. (1134) 297)

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24,25-Dihydroxyvitamin D-3
Arachidonic acid turnover; 1,25-$(OH)_2D_3$; Chondrocyte; Phospholipase A_2; Cell differentiation (Swain, L.D. (1136) 45)

Diisopropylfluorophosphate
Chemotaxis; Methylesterase; Substrate-assisted catalysis; Active-site serine (Krueger, J.K. (1119) 322)

Dimethylmalonimidate
Proteinuria; Glomerular basement membrane; Ultrafiltration; Cross-linking; Fibre-matrix hypothesis; Pore theory; Glomerulonephritis; Glutaraldehyde (Walton, H.A. (1138) 173)

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Protein kinase; Chaperone; Tyrphostin; Galactosylsphingosine (psychosine); Monomethyl sphingosine (Abdel-Ghany, M. (1137) 349)

Dimethylsulfoxide
Phospholipid bilayer; Temperature dependence (Anchordoguy, T.J. (1104) 117)

ATPase, Na^+/K^+-; Phosphoenzyme; Potassium; Magnesium (Fontes, C.F.L. (1104) 215)

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Hexokinase; ATP hydrolysis (Montero-Lomelí, M. (1120) 305)

Differentiation; PKC; Erythroleukemia cell (Chakravarthy, B.R. (1136) 83)

Dimyristoylphosphatidylcholine
Polyene antibiotic; Filipin; Fluorescence probe; Carboxyfluorescein; Calcein; Permeabilization; Model membrane; Light scattering; CD (Milhaud, J. (1105) 307)

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Bacteriorhodopsin; Phosphocholine headgroup; NMR, ^2H-; NMR, ^{31}P- (Gale, P. (1106) 317)

Amphotericin B; Polyene antibiotic; Liposome; Ergosterol; Cholesterol; Phosphatidylcholine (Cohen, B.E. (1108) 49)

Dinitrosyl iron complex
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Dinucleotide analog
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Dipalmitoylphosphatidylcholine
(−)-Δ^8-Tetrahydrocannabinol; (−)-*O*-Methyl-Δ^8-tetrahydrocannabinol; Drug–membrane interaction; DSC; X-ray diffraction; Solid state NMR; NMR, ^2H- (Yang, D.-P. (1103) 25)

Catalase; Superoxide dismutase; Glutathione peroxidase; Fetal development; (Human) (McElroy, M.C. (1117) 153)

Dipalmitoylphosphatidylglycerol
Poly(L-lysine); X-ray diffraction; DSC; Freeze-fracture; Phase transition; Subgel phase (Takahashi, H. (1110) 29)

Dipeptidyl peptidase IV
Growth hormone-releasing factor; Substrate kinetics; Substrate specificity; S_1-subsite (Bongers, J. (1122) 147)

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Diphenylcarbazide
Chlorotoluron; Electron donation; Photosystem II; Q_B niche (Cerović, Z.G. (1099) 247)

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Diphosphorylation
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Myosin; (Human platelet) (Itoh, K. (1136) 52)

Diphtheria toxin
Liposome; Monensin; Intercalation; Cytotoxicity; Ricin; Exotoxin A; (CHO cell); (*Pseudomonas*) (Madan, S. (1110) 37)

Dipolar group
Ionic channel; Conformational state; Barrier structure; Rate-theory analysis; Conductance; Selectivity (Nieto-Frausto, J. (1111) 81)

Dipyridamole
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Disk membrane
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Disulfide bridge
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4,4′-Dithiodipyridine-coupled reaction
Enzyme kinetics; Crystalline kinetics; D-Alanyl-D-alanine peptidase; Hippuryl-mercaptoacetic acid (Kelly, J.A. (1119) 256)

Divalent cation
Phosphatidylglycerol phosphate; *pgsA*; 3,4-Dihydroxybutyl-1-phosphonate; Polyamine (Ke, L. (1128) 250)

DNA methylation
tRNA-guanine transglycosylase; Queuine; Queuosine; 5-Azacytidine; Human tumor (Gündüz, U. (1139) 229)

DNAase sensitive region
Chromatin accessability; c-*fos*; Oncogene (Feng, J. (1130) 253)

DNA bending
DNA curvature; Gene expression; Protein–DNA interaction; DNA flexibility (Hagerman, P.J. (1131) 125)

DNA binding
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DNA binding protein
SEWA sarcoma cell; Aldolase A (Ronai, Z. (1130) 20)

Cytochrome *P*-450; *P*-450IIIA family; *P*-450HFLa; Gene regulation; (Fetal liver) (Itoh, S. (1130) 133)

Transcriptional regulation; Liver-specificity (De Simone, V. (1132) 119)

DNA conformation
DNA topoisomerase I; DNA–protein interaction (Camilloni, G. (1129) 73)

DNA curvature
Gene expression; Protein–DNA interaction; DNA bending; DNA flexibility (Hagerman, P.J. (1131) 125)

DNA delivery
Antibody-polylysine conjugate; Cationic liposome; Transfection; Endothelial cell (Trubetskoy, V.S. (1131) 311)

DNA ejection
Bacteriophage; Baseplate; Structural organization; Recognition; Infection process; Electron microscopy; Image processing (Khusainov, A.A. (1117) 237)

DNA flexibility
DNA curvature; Gene expression; Protein–DNA interaction; DNA bending (Hagerman, P.J. (1131) 125)

DNA fragmentation
Apoptosis; Cell death; Hydroxyurea; Burkitt's lymphoma (Johnson, C.A. (1136) 1)

DNA injection
Bacteriophage T7; Alkylation; DNA repair; Phage inactivation (Czaika, G. (1130) 52)

***dnaK* gene**
HSP70 sequence; Polymerase chain reaction; (*C. perfringens*) (Galley, K.A. (1130) 203)

DNA methylation
Histone; Tightly-bound chromatin protein (Caiafa, P. (1129) 43)

Gene transfection; α-Fetoprotein; Position effect; CpG dinucleotide (Hasse, A. (1131) 16)

Gene expression; Promoter; *dam* gene; Transcription; (*E. coli*) (Wu, T.-H. (1131) 47)

DNA minor groove
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DNA polymerase
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DNA repair synthesis; Ultraviolet irradiation; (Human fibroblast) (Popanda, O. (1129) 155)

Activity gel analysis; Proteolysis; (*S. aureofaciens*) (Košovský, J. (1129) 287)

DNA–protein interaction
DNA topoisomerase I; DNA conformation (Camilloni, G. (1129) 73)

DNA repair
DNA injection; Bacteriophage T7; Alkylation; Phage inactivation (Czaika, G. (1130) 52)

DNA repair enzyme
Apurinic/apyrimidinic endonuclease; cDNA sequence; Amino acid sequence; APX cDNA; (Human) (Seki, S. (1131) 287)

DNA repair synthesis
DNA polymerase; Ultraviolet irradiation; (Human fibroblast) (Popanda, O. (1129) 155)

DNA replication
DNA synthesis; Eukaryotic chromosome (Held, P.G. (1130) 235)

Protein overproduction; Primase; Zinc finger; (*E. coli*) (Stamford, N.P.J. (1132) 17)

DNA / RNA-conformation
Modified oligonucleotide; 2′-Deoxy-2′-fluoronucleoside; RNA-cleavage; RNAase H (Schmidt, S. (1130) 41)

DNA sequence
Reaction center; Photosynthesis; (*C. limicola* f.sp. *thiosulfatophilum*) (Büttner, M. (1101) 154)

L7a ribosomal protein; Transcriptional start site; Genome organization; (Human) (Colombo, P. (1129) 93)

HPRT; Photosynthetic bacteria; Phosphoribosyltransferase; Lesch-Nyhan syndrome (Beckman, D.L. (1129) 112)

rRNA gene, 16S; Internal promoter; *rrn* operon; Primer extension; (*Streptomyces*); (*E. coli*-like promoter) (Chang, S.-C. (1129) 219)

Neural cell adhesion molecule (NCAM); Kidney; (Human muscle) (Rossell, R.J. (1130) 95)

Subtilisin; Psychrotrophic bacterium; Cold adaptation (Narinx, E. (1131) 111)

Glycerol-3-phosphate dehydrogenase gene; (*D. virilis*); (*D. melanogaster*) (Tominaga, H. (1131) 233)

rRNA gene, 18S; Protozoan parasite; Oocyst; (*C. parvum*); (*C. muris*) (Cai, J. (1131) 317)

Protein structure; Iron-sulfur cluster (Stokkermans, J.P.W.G. (1132) 83)

rig; Ribosomal protein S15; Genome organization; (Rat) (Takasawa, S. (1132) 228)

Transforming growth factor-α; Preputial gland; Tissue distribution; (Mouse bladder) (Vaughan, T.J. (1132) 322)

Von Willebrand factor; Primary adhesion domain; (Bovine) (Bakhshi, M.R. (1132) 325)

Glycoprotein hormone; Hormone receptor; Pituitary; Placenta; Signal transduction; Receptor binding; Gene expression (Dias, J.A. (1135) 287)

DNA sequence
3-Ketothiolase deficiency; Point mutation; Splice acceptor site; PCR (Fukao, T. (1139) 184)

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Hydrogenase; Ni, FeS cluster; Protein assembly; Electron carrier; (*A. vinelandii*) (Chen, J.C. (1131) 199)

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DNA structure
Parallel stranded DNA; Scanning tunnelling microscopy (Zhu, J.-d. (1115) 239)

Supercoiled DNA; Helix opening; Cruciform; Extrusion mechanism (Murchie, A.I.H. (1131) 1)

X-ray absorption spectroscopy; Hydrogen bonding (Kirtley, S.M. (1132) 249)

DNA synthesis
DNA replication; Eukaryotic chromosome (Held, P.G. (1130) 235)

Cell growth; Cell morphology; HeLa cell; Normal human gingival fibroblast; Static magnetic field (Sato, K. (1136) 231)

DNA synthesis inhibition
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DNA topoisomerase
Compensatory mutation; *htrP* (Yang, T.-P. (1130) 227)

DNA topoisomerase I
DNA–protein interaction; DNA conformation (Camilloni, G. (1129) 73)

DNA topoisomerase II
8-Methoxycaffeine (Tornaletti, S. (1131) 30)

DNA topology
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DNA transcription factor
Galactosyltransferase; Salivary gland; Calcium ion; Calmodulin serine Kinase (Lee, S.-W. (1135) 115)

DNA transfection
Heat shock; Transient expression; (Cultured mammalian cell) (Takai, T. (1129) 161)

cDNA
Band 3 protein; Anion transport; Chloride transport; (Mouse erythroid); (*Xenopus* oocyte) (Lepke, S. (1106) 13)

Cytochrome *c* oxidase; Subunit V; Nucleotide sequence; Evolution; Mitochondrion; (*Dictyostelium discoideum*) (Rizzuto, R. (1129) 100)

Aldolase; Polyadenylation signal; 3′ Untranslated region; (Mouse) (Maine, A.B. (1129) 240)

Calpastatin; Calpain; Proteinase inhibitor; (Rat) (Lee, W.J. (1129) 248)

17α-Hydroxylase/C-17,20-lyase cytochrome *P*-450; (Porcine) (Conley, A.J. (1130) 75)

Protein phosphatase; Amino acid sequence; Isoenzyme (Mann, D.J. (1130) 100)

Δ^3, Δ^2-Enoyl-CoA isomerase; λgt11; λgt10; β-Oxidation; (Rat liver) (Tomioka, Y. (1130) 109)

ATP synthase δ-subunit; ATPase, F_1 δ-subunit; Mitochondrion (Jordan, E.M. (1130) 122)

α1-antitrypsin; pBluescript (Sinha, D. (1130) 209)

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Band 3 related protein (AE2); (Human kidney) (Gehrig, H. (1130) 326)

Adhesion molecule; Rat ICAM-1 (Kita, Y. (1131) 108)

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Sarcoplasmic reticulum; ATPase, $(Ca^{2+} + Mg^{2+})$-; Cardiac; Nucleotide sequence (Gambel, A.M. (1131) 203)

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Adhesion molecule; LECAM-1; (Rat) (Watanabe, T. (1131) 321)

Motilin associated protein; (Rabbit) (Banfield, D.K. (1131) 341)

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Inter-α-trypsin inhibitor; Precursor protein; Glycosaminoglycan chain; PCR; (Human) (Diarra-Mehrpour, M. (1132) 114)

Branched chain α-ketoacid dehydrogenase; PCR; Thiamin pyrophosphate; α-Ketoacid dehydrogenase (Zhao, Y. (1132) 207)

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Renal dipeptidase; Gene expression; COS-1 cell (Adachi, H. (1132) 311)

D-Amino-acid oxidase; Enzyme activity; Point mutation; Expression; (Mouse) (Sasaki, M. (1139) 315)

cDNA cloning
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Cytochrome *P*-450; Gene expression; (Monkey) (Komori, M. (1131) 23)

ATPase, H^+/K^+; Topology; Antibody (Bamberg, K. (1131) 69)

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Cecropin B; Nucleotide sequence; (*Bombyx mori*) (Taniai, K. (1132) 203)

Calmodulin; Amino acid sequencing; (*Tetrahymena thermophila*); (*Tetrahymena pyriformis*) (Takemasa, T. (1132) 219)

cDNA library
Activin receptor; Serine/threonine kinase; Transmembrane protein; Evolutionary conservation (Matzuk, M.M. (1130) 105)

cDNA sequence
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Membrane-bound alkaline phosphatase; Protein evolution; Silkworm; (*Bombyx mori*) (Itoh, M. (1129) 135)

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Pit-1; GHF-1; Pituitary; (Human) (Tatsumi, K.-i. (1129) 231)

Collagin; Hsp47; Gp46; Collagen-binding protein (Clarke, E.P. (1129) 242)

S-Adenosylmethionine decarboxylase; (Hamster) (Tekwani, B.L. (1130) 221)

HMG 2a mRNA; Developmental expression; (Chick liver) (Oka, T. (1130) 224)

Cytochrome *P*-450 (P-450IIIa); Dexamethasone; Cloning; Induction; (Mouse liver) (Yanagimoto, T. (1130) 329)

Glycogen phosphorylase; (Rat) (Schiebel, K. (1130) 349)

Pregnancy-specific β_1-glycoprotein-11s; RGD peptide motif (Brophy, B.K. (1131) 119)

DNA repair enzyme; Apurinic/apyrimidinic endonuclease; Amino acid sequence; APX cDNA; (Human) (Seki, S. (1131) 287)

Vacuolar ATPase; Plasma membrane; Tobacco hornworm; Lepidoptera; Insect; Larva (Novak, F.J.S. (1132) 67)

Decorin; Proteoglycan; (Rat) (Abramson, S.R. (1132) 225)

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Casein kinase II subunit α; Chromosome localization; (Human) (Wirkner, U. (1131) 220)

mitochondrial DNA
tRNA gene; Lysine tRNA; (Rapeseed) (Handa, H. (1130) 117)

mtDNA
Mitochondrion; Mitochondrial disease; Ribosome; Translation; rRNA (Schon, E.A. (1101) 206)

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recombinant DNA
Firefly luciferase; Primary structure; (*L. cruciata*); (*P. pyralis*) (Tatsumi, H. (1131) 161)

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Transcriptional control; Preproenkephalin gene; (Rat) (Durkin, R.C. (1131) 349)

Docosahexaenoate
Phospholipase A_2; Phosphatidylethanolamine; Arachidonate; Serum; (Rat) (Baker, R.R. (1125) 56)

Docosahexaenoic acid
α-Linolenic acid; (Rat brain) (Bourre, J.-M.E. (1124) 119)

Fish oil; Fatty acid, $n-3$; Icosapentaenoic acid; Intestinal absorption (Herzberg, G.R. (1124) 190)

Fatty acid oxidation; Desaturase, Δ^5-, Δ^6-;; Icosapentaenoic acid; (Rat hepatocyte) (Grønn, M. (1125) 35)

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($n-3$) Fatty acid; Nutrition; (Chicken brain) (Anderson, G.J. (1126) 237)

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Dolichol
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Dopa
Tyrosinase; Melanin; Estradiol; 2-Hydroxyestradiol; Estradiol-2,3-quinone; Melanosome (Jacobsohn, G.M. (1116) 173)

L-Dopa
Melanoma cell; Membrane; Nucleis (Slominski, A. (1139) 324)

Dopachrome rearrangement
Melanin; Melanogenesis; Regulatory factor; 5,6-Dihydroxyindole; Metal ion (Palumbo, A. (1115) 1)

DOPA-melanin
Catecholamine-melanin; Antioxidant; Cardiolipin; Lipid peroxidation; Melanin (Porębska-Budny, M. (1116) 11)

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Anionic channel; Whole-cell clamp; Phospholipase A_2; Snake venom; (*Oxyuranus scutellatus scutellatus*) (Possani, L.D. (1134) 210)

Dorso-ventral polarity
Easter proteinase; Proclotting enzyme; Toll receptor; (*Drosophila*) (Gay, N.J. (1132) 290)

Dosage compensation
Glue protein; Gene; Nucleotide sequence; (*Drosophila*) (Furia, M. (1130) 314)

Dot blot hybridization
tRNA; Nylon membrane (Heitzler, J. (1129) 273)

Double-layer theory
Zeta potential; Electrophoretic mobility; Lipid membrane; Ionic strength (Egorova, E.M. (1104) 102)

Zeta potential; Lipid suspension; Electrophoretic mobility; Photon correlation spectroscopy; Relaxation effect (Egorova, E.M. (1109) 1)

Down regulation
Chromaffin cell; Cycloheximide; Nitrobenzylthioinosine; Nucleoside transport; Protein recycling; Protein turnover (Torres, M. (1105) 291)

Down-regulation of expression
CNS development; Proline rich protein; Gene expression (Sazuka, T. (1132) 240)

Doxorubicin
Liposome; Cytotoxicity; Drug release (Horowitz, A.T. (1109) 203)

P-glycoprotein; Glycoprotein; Multidrug resistance; Archaebacterium (Miyauchi, S. (1110) 144)

N-Hydroxysuccinimide ester; Self-association; Transferrin; Albumin; Immunoglobulin (Demant, E.J.F. (1118) 83)

Drug–DNA intercalation; Polyelectrolyte effect (Ruggiero, J. (1129) 294)

NMR, ^{13}C-; Glycolysis; TCA cycle; (Heart failure) (Chatham, J.C. (1138) 1)

DPH
Fluorescence anisotropy; Myelin; Membrane fluidity; Pressure adaptation; Homeoviscous adaptation (Behan, M.K. (1103) 317)

Drug absorption
Permeability; Intestinal epithelium; Caco-2; Unstirred water layer; Aqueous boundary layer (Karlsson, J. (1111) 204)

Drug carrier
Liposome; Phosphatidylcholine, hydrogenated; Stability; Plasma; Alternative complement pathway; Opsonin; iC3b; (Rat) (Funato, K. (1103) 198)

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Drug delivery
Liposome; Blood clearance; Surface charge; Membrane fluidity (Gabizon, A. (1103) 94)

Liposome; Ganglioside GM_1; Reticuloendothelial system (Liu, D. (1104) 95)

Ganglioside; Phosphatidylethanolamine; Cholesterol; Immunoliposome (Litzinger, D.C. (1104) 179)

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Plasmalogen; Zinc phthalocyanine; Liposome; Triggered release (Anderson, V.C. (1109) 33)

Poly(ethylene glycol); Phosphatidylethanolamine; Liposome; Spleen (Litzinger, D.C. (1127) 249)

Drug delivery system
Liposome; Poly(ethylene glycol); Reticuloendothelial system (Maruyama, K. (1128) 44)

Drug interaction
Anti-arrhythmic drug; Organic cation transport; Renal secretion; Proton/organic cation antiport; Aminocephalosporin; Procainamide; ($LLC\text{-}PK_1$) (Takano, M. (1108) 133)

Drug–DNA intercalation
Doxorubicin; Polyelectrolyte effect (Ruggiero, J. (1129) 294)

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(−)-Δ^8-Tetrahydrocannabinol; (−)-*O*-Methyl-Δ^8-tetrahydrocannabinol; Dipalmitoylphosphatidylcholine; DSC; X-ray diffraction; Solid state NMR; NMR, ^{2}H- (Yang, D.-P. (1103) 25)

Drug metabolism
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Drug release
Liposome; Doxorubicin; Cytotoxicity (Horowitz, A.T. (1109) 203)

Drug resistance
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Drug sensitivity
Anthracycline; Cellular drug resistance; Daunomycin; Leukemia cell P388 (Ferrer-Montiel, A.V. (1104) 111)

DSC
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Phase diagram; Phospholipid membrane; Retinol; Retinoic acid (Ortiz, A. (1106) 282)

Galactolipid; Monogalactosyldiacylglycerol; Lipid phase behavior; X-ray diffraction; Freeze-fracture (Sanderson, P.W. (1107) 77)

Opioid peptide; Peptide–membrane interaction; Membrane permeability; Quasi-elastic light scattering (Ramaswami, V. (1109) 195)

Dipalmitoylphosphatidylglycerol; Poly(L-lysine); X-ray diffraction; Freeze-fracture; Phase transition; Subgel phase (Takahashi, H. (1110) 29)

Phase diagram; Phospholipid membrane; Retinol; Retinoic acid; NMR, ^{31}P- (Ortiz, A. (1112) 226)

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Duramycin
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Dynamic cycling
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Dynamic light scattering
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ATPase site; Heavy chain; Thermolysin digestion; Three heads; (*Tetrahymena*) (Niino, Y. (1100) 146)

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Easter proteinase
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Efflux route
Anion efflux pump; Methotrexate; Efflux inhibitor; ATP level; L1210 cell (Henderson, G.B. (1110) 137)

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Ehrlich ascites tumor
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Eicosa, see Icosa

Ektacytometer
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Elastin
α_1-Proteinase inhibitor; Elastase; Pancreas; Oxidation (Padrines, M. (1118) 174)

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Electrogenic step
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Electrometry
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DNA sequencing; Hydrogenase; Ni, FeS cluster; Protein assembly; (*A. vinelandii*) (Chen, J.C. (1131) 199)

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Estramustine-phosphate
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Fibronectin alternative splicing
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Fluorescent sulfatide
Fluorescent sphingolipid; Sulfatide metabolism; Lissamine rhodamine; (Human skin fibroblast) (Monti, E. (1124) 80)

Fluorescent sphingolipid; Monensin; Oligodendrocyte; Sulfatide metabolism; Sphingomyelin synthesis; (Rat glial cell) (Vos, J.P. (1126) 269)

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Folate binding protein
Gene; Pseudogene; Folate (Sadasivan, E. (1131) 91)

Folding
Protein stability; Carbonic anhydrase; Site-directed mutagenesis (Mårtensson, L.G. (1118) 179)

Folding intermediates
Ribonuclease A; Folding kinetics; Secondary structure; Tertiary structure (Lustig, B. (1121) 229)

Folding kinetics
Ribonuclease A; Folding intermediates; Secondary structure; Tertiary structure (Lustig, B. (1121) 229)

Follistatin
Activin; Activin-binding protein; Granulosa cell; Cytodifferentiation (Nakamura, T. (1135) 103)

Footprinting
*Eco*RI endonuclease; High pressure; Conformational change; Noncovalent interaction (Macgregor, Jr., R.B. (1129) 303)

Actinomycin; Sequence selectivity (Waterloh, K. (1131) 300)

Forebrain mitochondrion
Ischemia; Calcium homeostasis; Oxidative phosphorylation; Respiratory chain-linked oxidative phosphorylation; (Rat) (Sciamanna, M.A. (1134) 223)

Formate
Uric acid; Allantoin; Separation procedure; Purine catabolism; (Rat liver) (Di Stefano, A. (1117) 1)

Formate / formic acid binding
Chlorophyll *a* fluorescence; Bicarbonate effect; Binding species; Photosystem II; Q_A^- reoxidation; (*S. oleracea*) (Xu, C. (1098) 32)

Formycin A
Purine nucleoside phosphorylase; Substrate/inhibitor property; Formycin B; Structure-activity relationship; Tautomeric form; Ionic form; (*E. coli*) (Bzowska, A. (1120) 239)

Formycin B
Purine nucleoside phosphorylase; Substrate/inhibitor property; Formycin A; Structure-activity relationship; Tautomeric form; Ionic form; (*E. coli*) (Bzowska, A. (1120) 239)

***N*-Formylmethionine aminopeptidase**
Intestinal mucosa; Bioactive peptide (Sherriff, R.M. (1119) 275)

Forskolin
Facilitative glucose transporter; Glucose transporter; Photoaffinity labeling; Adipocyte (Hellwig, B. (1111) 178)

Brefeldin A; Cholesterol esterification; Cholesteryl ester hydrolysis; ACAT inhibitor; Triacylglycerol synthesis (Stein, O. (1125) 28)

Forssman hapten
α-*N*-Acetylgalactosaminidase; Erythrocyte; Erythrocyte membrane; (*Acremonium* sp.) (Izumi, K. (1116) 72)

Fos
Transcription factor; Differentiation; Jun; Glucocorticoid receptor (Ponta, H. (1129) 255)

fos
Epidermal growth factor; Transcription; Protein kinase C; Proto-oncogene induction; *jun* (Franklin, C.C. (1134) 137)

c-*fos*
Chromatin accessability; Oncogene; DNAase sensitive region (Feng, J. (1130) 253)

Magnetic field; Transcription; 60 Hz; T-lymphoblastoid cell; c-*myc*; c-*jun*; Protein kinase C (Phillips, J.L. (1132) 140)

Fourier transform
Nicotinic acetylcholine receptor; Ion flux response; Protein–lipid interaction; Cholesterol; Affinity-state transition; (*T. californica*) (Sunshine, C. (1108) 240)

Fragment
Fibrinogen; Spectroscopy (Azpiazu, I. (1119) 268)

Frameshift mutation
β-Thalassemia; Nonsense mutation; (Thai) (Winichagoon, P. (1139) 280)

FRAP
Phospholipid bilayer, supported; Langmuir-Blodgett film; Membrane fusion; Total internal reflection; Fluorescence microscopy (Kalb, E. (1103) 307)

Free cytosolic calcium ion
Sulfhydryl reagent; Thimerosal; Calcium ion, cytosolic; Membrane potential; Arachidonic acid; (Rat thymocyte) (Gukovskaya, A.S. (1111) 65)

Free energy
Charge separation; Diffusion potential; Fluorescence; Picosecond; Thylakoid membrane; Time-resolved spectroscopy (Dau, H. (1102) 91)

Free fatty acid
L-Aminocarnitine; Carnitine palmitoyltransferase 2; Long-chain acylcarnitine; Lipoprotein; (Rat) (Chiodi, P. (1127) 81)

Soleus muscle; Pyruvate dehydrogenase kinase; cyclic AMP; (Rat) (Stace, P.B. (1135) 201)

Free-flow electrophoresis
Thiamin pyrophosphatase; ATPase, H^+-; Pyrophosphatase; Golgi apparatus; Proton pumping; Electrophoresis, free flow; (Rat liver) (Brightman, A.O. (1104) 188)

Free iron
Nitric oxide; Iron-sulfur center; Dinitrosyl iron complex; Macrophage (Vanin, A.F. (1135) 275)

Free radical
Antioxidant; Zinc; Carnosine; Active oxygen species; Anti-ulcer drug (Yoshikawa, T. (1115) 15)

Hydroxyl radical; Site specificity; Salicylate; Dihydroxybenzoate; Phenylalanine (Gelvan, D. (1116) 183)

α_1-Antitrypsin; Diabetes; Copper(II) ion (Hall, P.K. (1121) 325)

Xanthine oxidase; Uric acid; Xanthine; Superoxide; Kinetics (Radi, R. (1122) 178)

Reduced coenzyme Q homolog; Antioxidant; (Rat hepatocyte) (Matsura, T. (1123) 309)

Vanadium; Lipid peroxidation; Microsome; Linoleic acid; (Human placenta) (Byczkowski, J.Z. (1125) 134)

Reduced coenzyme Q homolog; α-Tocopherol; Antioxidant; (Rat hepatocyte) (Matsura, T. (1127) 277)

Hydrogen peroxide; Nitroxide free radical; Cellular hydrogen peroxide; (Human tumor cell) (Voest, E.E. (1136) 113)

Freeze-fracture
Galactolipid; Monogalactosyldiacylglycerol; DSC; Lipid phase behavior; X-ray diffraction (Sanderson, P.W. (1107) 77)

Membrane fusion; Rough endoplasmic reticulum; Phosphatidylinositol cycle (Kan, F.W.K. (1107) 331)

Dipalmitoylphosphatidylglycerol; Poly(L-lysine); X-ray diffraction; DSC; Phase transition; Subgel phase (Takahashi, H. (1110) 29)

Fructose
Anoxia; Mitochondrion; ATP; (Perfused liver) (Okabe, H. (1098) 41)

NMR, ^{31}P-; Hepatocyte; Hepatotoxicity; Ethanol; Acetaminophen; Allyl alcohol; Agarose thread (Farghali, H. (1139) 105)

Fructose-bisphosphatase
Chloroplast protein; Enzyme regulation; Malate dehydrogenase; Thioredoxin (Häberlein, I. (1121) 293)

Fructose 1,6-bisphosphate
Pyruvate kinase; Phosphorylation; Enzyme regulation (Oude Weernink, P.A. (1121) 61)

Fructose-1,6-bisphosphate aldolase
Transglutaminase; 5-(Biotinamido)pentylamine; (HT29 colon cancer cell) (Lee, K.N. (1136) 12)

Fructose 2,6-bisphosphate
Neuron; Corticotropin; Phorbol ester; Glycolysis; 6-Phosphofructo-1-kinase (Anglard, P. (1133) 321)

Fructose metabolism
Bivascular liver perfusion; Metabolic compartmentation; Glucose synthesis; Glycolysis; Oxygen uptake; (Rat) (Suzuki-Kemmelmeier, F. (1116) 275)

F state
Cytochrome *c* oxidase; P state; Protonation change (Mitchell, R. (1101) 188)

FTIR
Oxysterol; Sickle cell disease; Erythrocyte membrane; GC-MS; TLC (Kucuk, O. (1103) 296)

Photolysis; Sarcoplasmic reticulum; ATPase, Ca^{2+}-; Caged calcium; Caged ATP (Buchet, R. (1104) 207)

ATPase, Ca^{2+}-; Lipid–protein interaction; Temperature adaptation; Intrinsic tryptophan fluorescence; Fluorescence; CD (Vrbjar, N. (1107) 1)

Hydrogen bonding; Alcohol–membrane interaction; Dehydration (Chiou, J.-S. (1110) 225)

Stratum corneum; Membrane structure; Phospholipid vesicle; Lipid bilayer (Krill, S.L. (1112) 273)

Stratum corneum; Membrane structure; Gel phase packing; Lipid fluidity; Phase transition (Krill, S.L. (1112) 281)

5′-Nucleotidase; Protein secondary structure; Seminal plasma; Metalloprotein; Zinc (Fini, C. (1118) 187)

Infrared spectroscopy; Protein conformation; Amide (Bandekar, J. (1120) 123)

Arrestin; Phototransduction; S-antigen; Secondary structure (Garcia-Quintana, D. (1122) 269)

Circular dichroism; Electron spin resonance; HIV; AIDS; Fusion; Lysis; HIV glycoprotein 41 000 (gp41) (Gordon, L.M. (1139) 257)

FTIR spectroscopy
Photosynthesis; Membrane protein; Structure–function relationship (Gerwert, K. (1101) 147)

FTIR study
Insulin; Insulin chain; Truncated insulin chain (Wei, J. (1120) 69)

L-Fucose dehydrogenase
α-L-Fucosidase; Bound-fucose assay; (*A. radiobacter*) (Tsuji, Y. (1117) 167)

α-L-Fucosidase
L-Fucose dehydrogenase; Bound-fucose assay; (*A. radiobacter*) (Tsuji, Y. (1117) 167)

N-Glycanase; Deglycosylation; Oligosaccharide (Piesecki, S. (1119) 194)

Fucosyl-transferase
Intestine; Weaning; Hydrocortisone; (RU 38486) (Biol, M.-C. (1133) 206)

Fucoxanthin
Chlorophyll-protein complex; Light-harvesting complex; Chlorophyll *c*; Linear dichroism; (*P. lutherii*); (*P. tricornutum*) (Hiller, R.G. (1102) 365)

Fumarase
Enzyme purification; Enzyme characterization; (*S. cerevisiae*) (Keruchenko, J.S. (1122) 85)

Functional expression
Glucose transporter; Reconstitution; Insulin response; (COS-7 cell) (Schürmann, A. (1131) 245)

Functional iron
Hemerythrin; Reconstitution; Sipunculid; (*P. gouldii*) (Zhang, J.-H. (1122) 293)

Fungal biosynthesis
Essential fatty acid; Mass spectrometry; Cytochrome *P*-450 oxidation; Arachidonic acid; Fatty acid oxidation; (*G. graminis*) (Brodowsky, I.D. (1124) 59)

Fungal morphogenesis
hsp82 gene; Transcription (Minchiotti, G. (1131) 103)

Fungal peroxidase
Glycosylation; Immunochemical reactivity (Kjalke, M. (1120) 248)

Fungus
Ribosome; Thermophile; Electron microscopy; Image analysis (Harauz, G. (1130) 289)

Fura-2
Magnesium; Calcium; Vascular smooth muscle cell (Zhang, A. (1134) 25)

Fusion
Brush-border membrane; Apical membrane; Single channel; (Rabbit kidney) (Bellemare, F. (1105) 10)

Dextran sulfate; Influenza virus; GP4F cell (Krumbiegel, M. (1110) 158)

Circular dichroism; FTIR; Electron spin resonance; HIV; AIDS; Lysis; HIV glycoprotein 41 000 (gp41) (Gordon, L.M. (1139) 257)

Fusion protein
Membrane fusion; Resonance energy transfer; Synthetic peptide; Liposome; Viral protein (Glushakova, S.E. (1110) 202)

Fusogen
Amphipathic α-helical structure; Liposome; Membrane fusion; Alpha-helical content (Lee, S. (1103) 157)

G

G_{M1b}
Ganglioside; Monosialoganglioside; Sialidase sensitivity; Myelomonocytic cell line; Murine immune cell (Yohe, H.C. (1109) 210)

G_s
Prostacylin receptor; Adenosine A_2 receptor; Desensitization (Keen, M. (1134) 157)

Gadolinium
Poly(ethylene glycol); Monomethoxypoly(ethylene glycol); Liposome; Magnetic resonance imaging; NMR, ^{31}P-; Paramagnetic; Contrast agent (Tilcock, C. (1110) 193)

Galactolipid
Monogalactosyldiacylglycerol; DSC; Lipid phase behavior; X-ray diffraction; Freeze-fracture (Sanderson, P.W. (1107) 77)

Galactolipid synthesis
Chloroplast; Envelope; Thylakoid; Lipid asymmetry; Lipolytic treatment; UDP-[^{14}C]galactose (Rawyler, A. (1104) 331)

D-Galactose
Lectin; Equilibrium dialysis; Hemagglutination; Hydrophobic thiosaccharide; (*P. aeruginosa*) (Garber, N. (1116) 331)

Galactose transport
Reconstitution; Binding protein dependence; Proteoliposome; (*S. typhimurium*) (Richarme, G. (1104) 201)

β-Galactoside binding protein
Negative growth factor; Cytokine; Glycan association; Oligomeric state (Wells, V. (1121) 239)

Galactosylsphingosine (psychosine)
Protein kinase; Chaperone; Tyrphostin; Monomethyl sphingosine; Dimethylsphingosine (Abdel-Ghany, M. (1137) 349)

Galactosyltransferase
Salivary gland; Calcium ion; Calmodulin serine Kinase; DNA transcription factor (Lee, S.-W. (1135) 115)

Gallium-67 desferoxamine
Liposome; Clearance; Poly(ethylene glycol) (PEG); Desferoxamine; (Mouse); (Rat) (Woodle, M.C. (1105) 193)

***GAL*10 promoter**
Heterologous gene expression; Lysine-rich histone; Transcription; Upstream activation sequence; (*S. cerevisiae*) (Shwed, P.S. (1131) 152)

Ganglioside
Phosphatidylethanolamine; Cholesterol; Immunoliposome; Drug delivery (Litzinger, D.C. (1104) 179)

G_{M1b}; Monosialoganglioside; Sialidase sensitivity; Myelomonocytic cell line; Murine immune cell (Yohe, H.C. (1109) 210)

Membrane; Conductance; Lymphocyte; GM1; GM3 (Cametti, C. (1111) 197)

Sulfatide; Glycosphingolipid; Membrane fusion; Myelin basic protein; Melittin (Maggio, B. (1112) 105)

Monoclonal antibody; ELISA; Binding specificity; Glycolipid (Kotani, M. (1117) 97)

Monoclonal antibody (Ozawa, H. (1123) 184)

Immunosuppression; Lymphoproliferation; Sialic acid; Glycosphingolipid (Ladisch, S. (1125) 180)

Cytoplasmic calcium ion; (Human blood platelet) (Vasylevskaya, V.V. (1127) 221)

Polyoma transformant; SV40 transformant; Cultured cell; (Rat embryo fibroblast) (Bai, H. (1136) 23)

Growth factor; Autophosphorylation; (Swiss 3T3 cell) (Guan, Z. (1136) 315)

Ganglioside GM_1
Liposome; Drug delivery; Reticuloendothelial system (Liu, D. (1104) 95)

Ganglioside synthesis
Granulosa cell culture; Okadaic acid; Desensitization; Gonadotropin action (Hattori, M.-a. (1137) 101)

Gardos channel
Erythrocyte; Sickle cell; Deformation; Ektacytometer; Calcium ion-activated potassium ion channel; Potassium ion channel; Charybdotoxin (Johnson, R.M. (1107) 314)

Gas chromatography-mass spectrometry
Thromboxane; Prostacyclin; Prostaglandin E_2; Urine; Platelet; Vessel; Kidney; Aspirin; Immuno-affinity (Chiabrando, C. (1133) 247)

Gastric ATPase
ATPase; Proton pump; Somatostatin; Omeprazole (Tari, A. (1129) 49)

Gastric inhibitory peptide
Gastrointestinal hormone; Molecular cloning; PCR; (Rat) (Higashimoto, Y. (1132) 72)

Gastric secretion
ATPase, H^+/K^+-; Antibody; Topography; Synthetic peptide; Membrane protein (Smolka, A. (1108) 75)

Gastrin releasing peptide
Growth factor; Retinoic acid; Lung surfactant; Lung development (Fraslon, C. (1123) 65)

Gastrointestinal hormone
Molecular cloning; PCR; Gastric inhibitory peptide; (Rat) (Higashimoto, Y. (1132) 72)

Gating mechanism
Ribonuclease T_1; Viscosity; Fluorescence quenching; Acrylamide (Somogyi, B. (1119) 81)

Gc globulin (vitamin D-binding protein)
Actin; Monoclonal antibody; ELISA (Osawa, M. (1117) 271)

GC-MS
Oxysterol; Sickle cell disease; Erythrocyte membrane; TLC; FTIR (Kucuk, O. (1103) 296)

X-ray crystallography; Polarization microscopy; L2 phase; *t*-Butyldimethylsilyl ether; Phospholipase C (Norberg, P. (1112) 52)

Icosapentaenoic acid; Reproduction; Prostaglandin E_3; Cytochrome *P*-450 (Oliw, E.H. (1126) 261)

Cholesterol; Hydroxylation; (Liver microsome) (Björkhem, I. (1128) 73)

GDP
Elongation factor 2; Acidic ribosomal protein; GTP; (Rat liver) (Lavergne, J.-P. (1132) 284)

GDP binding
Brown adipose tissue; Phospholipid composition ; Mitochondrion; Uncoupling protein; Energization parameter; Proton conductance (Goubern, M. (1107) 159)

Gelatin affinity
Skeletal muscle; Muscle; Glycogen phosphorylase; Immunolocalization (Law, D.J. (1122) 225)

Gel filtration
Vicinal water; Nonsolvent water; Sephadex; Bio-Gel (Van Steveninck, J. (1115) 96)

Gel phase packing
Stratum corneum; FTIR; Membrane structure; Lipid fluidity; Phase transition (Krill, S.L. (1112) 281)

Gene
Glue protein; Dosage compensation; Nucleotide sequence; (*Drosophila*) (Furia, M. (1130) 314)

Folate binding protein; Pseudogene; Folate (Sadasivan, E. (1131) 91)

Gene cloning
Amino acid sequence; Serine proteinase; Substrate specificity; (*S. Aureus*) (Yoshikawa, K. (1121) 221)

Cuticle protein; Genomic sequence; Transcriptional regulation; Molting hormone; (*B. mori*) (Nakato, H. (1132) 161)

Cholesterol 7α-hydroxylase; Gene sequence; Regulatory element (Chiang, J.Y.L. (1132) 337)

Acetylcholine receptor; Excitatory neurotransmission; Central nervous system; Evolution; (*D. melanogaster*) (Gundelfinger, E.D. (1137) 299)

Gene conservation
Cytochrome *c* oxidase, aa_3; Mitochondrion; Site-directed mutagenesis; Heme (Gennis, R.B. (1101) 184)

Gene deletion
Androsterone UDP-glucuronosyltransferase; Genetic deficiency; Polymerase chain reaction; (Rat) (Homma, H. (1138) 34)

Branched chain acyltransferase; Maple syrup urine disease; Exon skipping (Herring, W.J. (1138) 234)

Gene expression
C/EBP; Hyperlipidemia; Hypolipidemic drug; Transcription factor (Staels, B. (1123) 227)

Apolipoprotein A-I diet; Apolipoprotein A-II diet; (Mouse strain) (Srivastava, R.A.K. (1125) 251)

Cartilage; Collagen; mRNA; Recombinant DNA; (Mouse) (Elima, K. (1130) 78)

Endoglucanase; Intron; Protein secretion (Hall, J. (1130) 259)

Cytochrome *P*-450; cDNA cloning; (Monkey) (Komori, M. (1131) 23)

DNA methylation; Promoter; *dam* gene; Transcription; (*E. coli*) (Wu, T.-H. (1131) 47)

Prostaglandin H synthase; Nonsteroidal anti-inflammatory drug; Naproxen; Endothelial cell (Zyglewska, T. (1131) 78)

DNA curvature; Protein–DNA interaction; DNA bending; DNA flexibility (Hagerman, P.J. (1131) 125)

Kininogen; Kallikrein; Estrogen; Progesterone; (Rat) (Chen, L.-M. (1131) 145)

Metallothionein; Copper; *Trans*-acting factor (Yamada, T. (1131) 188)

Atherosclerosis; Lipoprotein; Transcription factor; Lipoprotein lipase; α-Fetoprotein; (Rat liver) (Peinado-Onsurbe, J. (1131) 281)

Protein C; cDNA cloning; (Rat kidney) (Okafuji, T. (1131) 329)

Topoisomerase isoform; Normal tissue; Differentiation; Development; (Mouse) (Capranico, G. (1132) 43)

Protein kinase C-ϵ; Phorbol ester; Catalytic domain; Cloning (Basta, P. (1132) 154)

Tumor necrosis factor; Recombinant; COS-7; Carbohydrate; (Mouse) (Koyama, Y. (1132) 188)

CNS development; Proline rich protein; Down-regulation of expression (Sazuka, T. (1132) 240)

Heme oxygenase; RNA (Kurata, S.-i. (1132) 255)

Renal dipeptidase; cDNA; COS-1 cell (Adachi, H. (1132) 311)

Glycoprotein hormone; Hormone receptor; Pituitary; Placenta; Signal transduction; Receptor binding; DNA sequence (Dias, J.A. (1135) 287)

Cell surface; Homeobox; *Hox-3.3*; Aqueous two-phase system; Transfection; (Mouse) (Shimeld, S.M. (1136) 253)

Insulin; Albumin; Transcription; Phorbol ester; (Rat hepatoma cell) (Messina, J.L. (1137) 225)

Ethanol; Neural cell; Two-dimensional gel electrophoresis (Miles, M.F. (1138) 268)

ATPase, Ca^{2+}-; Cardiac plasma membrane; Sarcoplasmic reticulum function; Cardiomyopathy (Kuo, T.H. (1138) 343)

Urea cycle enzyme; Liver development; (Mutant mouse) (Tomomura, M. (1139) 167)

Ceruloplasmin; Liver; Lung; Organ development; Premature delivery; (Guinea-pig) (Bingle, C.D. (1139) 217)

Gene family
Minor small nuclear ribonucleoprotein particle; RNA 3′ processing; Transcription signal; (*Xenopus laevis*) (Phillips, S.C. (1131) 95)

Gene fusion
Cardiolipin; Cardiolipin synthase; *cls*; Phospholipid; Operon fusion (Heber, S. (1129) 1)

Translational control; Transformation; Thermal hysteresis (Rancourt, D.E. (1129) 188)

Gene mutation
Sandhoff disease; Hexosaminidase; Tay-Sachs disease; (Infantile) (McInnes, B. (1138) 315)

Gene promoter
Nucleic acid sequence; Transcriptional regulation; CAT assay; Proliferating Cell Nuclear Antigen (PCNA); (Rat) (Ohashi, Y. (1130) 175)

Gene regulation
Cytochrome *P*-450; *P*-450IIIA family; *P*-450HFLa; DNA binding protein; (Fetal liver) (Itoh, S. (1130) 133)

α_2-HS-glycoprotein; Fetuin; mRNA; Development (Yang, F. (1130) 149)

Calmodulin; cyclic AMP; mRNA analysis; Pheochromocytoma cell line; (Rat cell line) (Bai, G. (1130) 189)

Long terminal repeat; Intracisternal A particle; Rodent genome; Repetitive sequence; Eukaryotic promoter (Furter, C.S. (1130) 213)

Promoter; *cis*-acting sequence; Tissue specific gene expression; α-Fetoprotein (Rabek, J.P. (1130) 317)

Proteinase; T lymphocyte; Cytotoxicity (Prendergast, J.A. (1131) 192)

Gene sequence
Cholesterol 7α-hydroxylase; Gene cloning; Regulatory element (Chiang, J.Y.L. (1132) 337)

Gene structure
Lipoprotein lipase; 5′ Flanking region (Cooper, D.A. (1129) 166)

Ornithine aminotransferase; Nucleotide sequence (Shull, J.D. (1132) 214)

Cephalosporin acylase; γ-Glutamyltranspeptidase; Recombinant DNA (Ishiye, M. (1132) 233)

Mitochondrion; ATP synthase, F_0F_1- (Pierce, D.J. (1132) 265)

Gene targeting
Gene therapy; Adenosine deaminase deficiency (Vega, M.A. (1138) 253)

Gene therapy
Gene targeting; Adenosine deaminase deficiency (Vega, M.A. (1138) 253)

Genetic deficiency
Androsterone UDP-glucuronosyltransferase; Gene deletion; Polymerase chain reaction; (Rat) (Homma, H. (1138) 34)

Genetics
Cytochrome *b*; bc_1 complex; Mitochondrial integral membrane protein; (Yeast) (Colson, A.-M. (1101) 157)

Yolk lipid; Dietary effect (Kuksis, A. (1124) 205)

Genetic variant
Human serum albumin; Isoelectric focusing; Amino acid sequence; Point mutation (Minchiotti, L. (1119) 232)

Gene transcription
Cytochrome *c*; Cytochrome *c* oxidase; (Yeast) (Poyton, R.O. (1101) 252)

Gene transfection
DNA methylation; α-Fetoprotein; Position effect; CpG dinucleotide (Hasse, A. (1131) 16)

Gene transfer
Transforming growth-factor β1; Tumorigenesis; Angiogenesis; (Chinese hamster ovary cell line) (Ueki, N. (1137) 189)

Genistein
Sodium ion–proton exchange; Vasopressin; Tyrosine phosphorylation; Phorbol ester; Staurosporine; Protein kinase C; Blood platelet; (Human) (Aharonovits, O. (1112) 181)

Genome organization
L7a ribosomal protein; Transcriptional start site; DNA sequence; (Human) (Colombo, P. (1129) 93)

rig; Ribosomal protein S15; DNA sequence; (Rat) (Takasawa, S. (1132) 228)

Genome sequence
Bacteriophage α3; Evolution; Secondary structure; Cryptic origin (Kodaira, K.-I. (1130) 277)

Genomic cloning
Monitor peptide; PSTI; Sequence analysis; (Rat) (Tsuzuki, S. (1132) 199)

Genomic copy number
Developmental mRNA expression; Codon usage; Secondary and tertiary protein structure; Protein structure; Inverted PCR; Intron (Rogers, P.V. (1129) 262)

Genomic gene
Transcriptional factor; Mitochondrion; Upstream region; (Human) (Tominaga, K. (1131) 217)

Genomic organization
PACAP precursor gene; Chromosomal location; (Human) (Hosoya, M. (1129) 199)

Genomic sequence
Growth hormone; (Atlantic salmon) (Male, R. (1130) 345)

Atherosclerosis; Reverse cholesterol transport; High density lipoprotein; Promoter; Enhancer (Murray, R.W. (1131) 207)

Lipase gene; Cloning; (Yeast); (*C. cylindracea*) (Longhi, S. (1131) 227)

Cuticle protein; Gene cloning; Transcriptional regulation; Molting hormone; (*B. mori*) (Nakato, H. (1132) 161)

Germination
Barley; Lipoxygenase; Purification; Isoenzyme; Linoleic acid hydroperoxide (Doderer, A. (1120) 97)

Gestational diabetes mellitus
Cell membrane; Platelet; Insulin therapy; Insulin-dependent diabetes mellitus (Mazzanti, L. (1139) 65)

G_{M1}-galactosidase
Lysosomal glycosidase; Neuraminidase; Multienzyme complex; Supramolecular enzyme organization; Micellar enzymology (Pshezhetsky, A.V. (1122) 154)

GHF-1
Pit-1; cDNA sequence; Pituitary; (Human) (Tatsumi, K.-i. (1129) 231)

Gibberellic acid
Wheat aleurone; *S*-Adenosylmethionine synthetase; Regulation of AdoMet synthetase; Enzyme synthesis, de novo; Enzyme subunit, in vitro hybridization of (Mathur, M. (1137) 338)

Glandular stomach
Group I phospholipase A_2; Ontogeny; (Rat pancreas) (Dimberg, J. (1130) 47)

Glioma
Plasmalogen; Fatty acid, $(n-3)$ and $(n-6)$; Polyunsaturated fatty acid; Phospholipid; Subcellular fraction; Plasma membrane; Microsome; Percoll extraction (Thomas, S.E. (1126) 125)

Globin
Translation efficiency; mRNA; Base pair; Untranslated region (Francès, V. (1130) 29)

Globin, β-like
cDNA; mRNA; Ontogenic shift; (Hamster YSEC) (Li, H. (1130) 218)

Globin cDNA
Nucleotide sequence (Lee, K.M. (1130) 343)

Globin fluctuation
NMR; 1,4,5,8-Tetramethylhemin; Myoglobin; Heme rotation (Neya, S. (1117) 243)

β-Globin gene
PCR; Mutation; Hemoglobin Hamilton; CpG dinucleotide (Manca, L. (1139) 17)

Glomerular basement membrane
Heparan sulphate proteoglycan; Sulfation; (Rat glomerulus) (Castillo, G.M. (1136) 119)

Proteinuria; Ultrafiltration; Cross-linking; Fibre-matrix hypothesis; Pore theory; Glomerulonephritis; Dimethylmalonimidate; Glutaraldehyde (Walton, H.A. (1138) 173)

Glomerular epithelial cell
Polycation; Glomerular filtration unit (Singh, A.K. (1120) 337)

Glomerular filtration unit
Polycation; Glomerular epithelial cell (Singh, A.K. (1120) 337)

Glomerulonephritis
Proteinuria; Glomerular basement membrane; Ultrafiltration; Cross-linking; Fibre-matrix hypothesis; Pore theory; Dimethylmalonimidate; Glutaraldehyde (Walton, H.A. (1138) 173)

β-1,3-Glucanase
Enzyme purification; (*S. glucanicum*) (Rapp, P. (1117) 7)

Glucocorticoid
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Protein synthesis; Protein phosphorylation; Protein dephosphorylation; Antigen; (Rat basophilic leukemia cell) (Her, E. (1133) 63)

Growth; Protein kinase C; Phospholipid turnover (Krasil'nikov, M.A. (1135) 91)

Prostaglandin; Protein kinase C; Amnion; (Parturition); (Human) (Zakar, T. (1136) 161)

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Glucooligosaccharide oxidase
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Glucosamine-6-phosphate synthase
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Glucose metabolism
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Glucose oxidase
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Glucose synthesis
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Glucose transport
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Membrane transport; 3-*O*-Methylglucose efflux; Phorbol myristate acetate; Kinetics; (Frog sartorius muscle) (Booz, G.W. (1109) 132)

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Glucose transporter
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Glucose uptake
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Glucosylceramidase
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GLUT4
GLUT1; Messenger RNA; Antiserum; (Rat) (Weinstein, S.P. (1136) 302)

L-Glutamate
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Glutamate dehydrogenase
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Proton release; Hydride transfer; Enzyme kinetics (Fisher, H.F. (1119) 52)

Isozyme; (*C. reinhardtii*) (Moyano, E. (1119) 63)

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Glutamate-pyruvate transaminase
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Glutamate secretion
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Glutamine
Kidney cortex; Mitochondrion; Glutamate metabolism (Kunz, W.S. (1100) 329)

Glutamine analog
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Glutamine synthetase
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Glutaminolysis
Glycolysis; ATP; Macrophage; (BB rat) (Wu, G. (1115) 166)

ε(γ-Glutamyl)lysine crosslink
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γ-Glutamyltranspeptidase
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Coelenterate; Glutamate receptor; Feeding response (Grosvenor, W. (1117) 120)

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Glutathione conjugate
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Glutathione disulfide
Glutathione conjugate; Membrane transport; Erythrocyte (Akerboom, T.P.M. (1103) 115)

Ascorbic acid; Dehydroascorbic acid; Glutathione; Redox couple; Oxidation-reduction; Ascorbic acid regeneration (Winkler, B.S. (1117) 287)

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Catalase; Superoxide dismutase; Dipalmitoylphosphatidylcholine; Fetal development; (Human) (McElroy, M.C. (1117) 153)

Glutathione *S*-transferase
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Glutathione transferase
Mitomycin C; Resistance; Glutathione; Detoxification (Singh, S.V. (1137) 257)

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Glycan structure
Glycan; COSY; NOESY; Surface layer glycoprotein; S-layer (Altman, E. (1117) 71)

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Non-enzymatic glycosylation; Diabetes mellitus; Aging; Serum albumin; Diclofenac; Aspirin (Van Boekel, M.A.M. (1120) 201)

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Glyceraldehyde 3-phosphate dehydrogenase
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Glycerolipid
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(*sn*)-Glycerol-3-phosphate acyltransferase
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Glycerol-3-phosphate dehydrogenase gene
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Glycoalkaloid
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Glycogen phosphorylase
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cDNA sequence; (Rat) (Schiebel, K. (1130) 349)

Glycolate oxidase
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Glycolipid
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Glycolysis
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Bivascular liver perfusion; Metabolic compartmentation; Fructose metabolism; Glucose synthesis; Oxygen uptake; (Rat) (Suzuki-Kemmelmeier, F. (1116) 275)

Neuron; Corticotropin; Phorbol ester; 6-Phosphofructo-1-kinase; Fructose 2,6-bisphosphate (Anglard, P. (1133) 321)

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In situ; Regulation; Adipocyte (McCormick, K.L. (1135) 1)

NMR, ^{13}C-; TCA cycle; Doxorubicin; (Heart failure) (Chatham, J.C. (1138) 1)

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Glycoprotein
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P-glycoprotein; Multidrug resistance; Reconstitution; Cholesterol (Saeki, T. (1107) 105)

P-glycoprotein; Multidrug resistance; ATPase, Na^+/K^+-; ATPase, Mg^{2+}-; Detergent solubilization; (CHO cell) (Doige, C.A. (1109) 149)

P-glycoprotein; Colchicine transport; Vinblastine transport; Plasma membrane; Multidrug resistance; Chemosensitizer; (CHO cell) (Doige, C.A. (1109) 161)

P-glycoprotein; Doxorubicin; Multidrug resistance; Archaebacterium (Miyauchi, S. (1110) 144)

Neuraminidase; Kurloff cell; Lectin; Affinoblotting; Glycosidase; Sialidase; Acid phosphatase (Landemore, G. (1116) 112)

Amino acid sequence; Structure-activity relationship; Spleen; Saposin-C; Activator protein (Sano, A. (1120) 75)

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Recombinant DNA; Intron-exon boundary; Molecular evolution; (*Cyprinus carpio*) (Huang, C.-J. (1129) 237)

Hormone receptor; Pituitary; Placenta; Signal transduction; Receptor binding; Gene expression; DNA sequence (Dias, J.A. (1135) 287)

Glycoprotein Ia/IIa
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Glycoprotein VI
Adhesion assay; Collagen; Matrigel; Glycoprotein Ia/IIa; (Human platelet) (Moroi, M. (1137) 1)

Glycosaminoglycan
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Glycosaminoglycan chain
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Glycosidase
Neuraminidase; Kurloff cell; Glycoprotein; Lectin; Affinoblotting; Sialidase; Acid phosphatase (Landemore, G. (1116) 112)

Glycosphingolipid
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Unsaturated fatty acid; NMR, ^2H-; Lipid bilayer (Singh, D. (1107) 23)

Ganglioside; Sulfatide; Membrane fusion; Myelin basic protein; Melittin (Maggio, B. (1112) 105)

Tumor associated carbohydrate antigen; Pancreatic cancer; Blood group antigen; Neolacto-series carbohydrate chain (type 2) (Hattori, H. (1125) 21)

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Glycosylation
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Scatter factor; Cell motility (Hofmann, R. (1120) 343)

CD46; Syncytiotrophoblast; Platelet; Kidney; Lectin (Vanderpuye, O.A. (1121) 301)

Lipoprotein lipase; Adipose tissue; Subcutaneous; Omental; (Human) (Sakayama, K. (1127) 153)

Glycosylation structure
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Glycosyltransferase
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Glycyrrhetinic acid
11β-Hydroxysteroid dehydrogenase; Corticosteroid 11-oxidation; Bireactant kinetics (Monder, C. (1115) 23)

Glyoxylate cycle
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GM1
Membrane; Conductance; Lymphocyte; Ganglioside; GM3 (Cametti, C. (1111) 197)

GM_1
Oligosaccharide conformation; Glycosphingolipid; NMR, ^2H- (Jarrell, H. (1103) 331)

GM2-activator
Sphingolipid activator protein; Sulfatide activator; Glucosylceramidase activator; Saposin; Sphingolipid; Sphingolipidose; Lysosome (Fürst, W. (1126) 1)

GM3
Membrane; Conductance; Lymphocyte; Ganglioside; GM1 (Cametti, C. (1111) 197)

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Calcium ion extrusion; Calcium ion flux; Calcium pump; ATPase, $(Ca^{2+} + Mg^{2+})$-; Quin2; Chlorotetracycline; (Human platelet) (Johansson, J.S. (1105) 40)

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Guanylyl cyclase; Retina; Purification (Horio, Y. (1133) 81)

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Smooth muscle; Phosphodiesterase inhibitor; (Bovine aorta) (Rascón, A. (1134) 149)

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Cell-free transfer; NADH; Plasma membrane; Ascorbic acid; (Rat liver) (Rodriguez, M. (1107) 131)

Glycosyltransferase; Hepatoma; Liver; (Rat) (Hartel-Schenk, S. (1115) 108)

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Gonadotropin action
Granulosa cell culture; Okadaic acid; Ganglioside synthesis; Desensitization (Hattori, M.-a. (1137) 101)

Gp46
Collagin; cDNA sequence; Hsp47; Collagen-binding protein (Clarke, E.P. (1129) 242)

GP4F cell
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GPIIb-IIIa
Platelet; Integrin αIIbβ3; Nucleotide binding; Photoaffinity labeling; 8-azido-ATP (Mayinger, P. (1137) 77)

GPIIIa-derived peptide
RGD; Fibrinogen; Integrin; Platelet receptor; Von Willebrand factor (Cook, J.J. (1119) 312)

G-protein
Arachidonate release; Phospholipase A_2; Thrombin; Fluoroaluminate; cyclic GMP; (Human platelet) (Stasi, M. (1124) 279)

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Substance P receptor; Guinea-pig uterus; COS cell expression (Gorbulev, V. (1131) 99)

Gradient
Transport; Brush border membrane; Imino acid; Amino acid; (Rabbit jejunum); (Rabbit ileum) (Munck, L.K. (1116) 83)

Gramicidin
Local anesthetic; Anesthetic; Lipid bilayer; Ion channel (Bridal, T.R. (1107) 31)

Sterol; Channel inactivation; Red blood cell membrane; Lipid bilayer (Schagina, L.V. (1109) 91)

Black lipid membrane; Tetraether lipid; Capacitance; Conductance; Valinomycin; Nonactin; Lipopolysaccharide; (*Th. acidophilum*) (Stern, J. (1128) 227)

Gramicidin A
NMR; Monte Carlo simulation; Bilayer (Xing, J. (1106) 227)

Grana
Plastoquinone; Electron transfer chain; Photosystem II; Plastocyanin; Restricted diffusion; Stroma (Joliot, P. (1101) 1)

Granule
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Granulocyte
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Neutrophil; Cytochrome *b*-558; EPR; NADPH oxidase; (Pig) (Fujii, H. (1136) 239)

Granuloma
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Proteoglycan; Heparan sulfate proteoglycan; Schistosomiasis (Silva, L.-C.F. (1138) 133)

Proteoglycan; Heparan sulfate proteoglycan; Dermatan sulfate proteoglycan; Schistosomiasis; Liver connective tissue (Silva, L.-C.F. (1139) 96)

Granulosa cell
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Granulosa cell culture
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Green photosynthetic bacterium
Chlorosome; Light-harvesting antenna; Bacteriochlorophyll *c*; Linear dichroism; Pigment aggregate (Hirota, M. (1099) 271)

Green sulfur bacterium
Pigment analysis; Primary electron acceptor; Bacteriochlorophyll 663; Chlorophyll *a* (Van de Meent, E.J. (1102) 371)

***gro*EL**
Recombinant DNA; Heat shock protein; *gro*ES; (*B. abortus*) (Gor, D. (1130) 120)

***GroEL*-like protein**
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***GroEL* operon**
HSP60 sequence; Polymerase chain reaction; (*C. perfringens*) (Rusanganwa, E. (1130) 90)

***gro*ES**
Recombinant DNA; Heat shock protein; *gro*EL; (*B. abortus*) (Gor, D. (1130) 120)

Group I phospholipase A_2
Ontogeny; Glandular stomach; (Rat pancreas) (Dimberg, J. (1130) 47)

Growth
Growth factor; Hormone; NADH oxidase; Plasma membrane; (Rat liver) (Brightman, A.O. (1105) 109)

Topoisomerase II; Cytoplasmic factor; (Mouse) (Collett, A.G. (1132) 259)

Glucocorticoid; Protein kinase C; Phospholipid turnover (Krasil'nikov, M.A. (1135) 91)

Growth factor
Hormone; NADH oxidase; Growth; Plasma membrane; (Rat liver) (Brightman, A.O. (1105) 109)

Pigeon milk; Protein purification (Shetty, S. (1117) 193)

Gastrin releasing peptide; Retinoic acid; Lung surfactant; Lung development (Fraslon, C. (1123) 65)

Ganglioside; Autophosphorylation; (Swiss 3T3 cell) (Guan, Z. (1136) 315)

Growth hormone
Drug metabolism; Cytochrome *P*-450; Hormone regulation; Sexual differentiation; Xenobiotic metabolism (Henderson, C.J. (1118) 99)

Amino acid sequence; Primary structure; Protein purification (Yasuda, A. (1120) 297)

Genomic sequence; (Atlantic salmon) (Male, R. (1130) 345)

Growth hormone-releasing factor
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Growth inhibitor
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Growth regulation
α_1-Antichymotrypsin; Microheterogeneity; Breast carcinoma; MCF-7 (Laursen, I. (1121) 119)

Growth suppressor protein
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GSH deficiency
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GSH transferase π
G-site; Spin-labelled glutathione; EPR; Glutathione (Caccuri, A.M. (1122) 265)

$g = 4$ signal
EPR; Multifrequency; Oxygen-evolving complex; Spin state; S_2-state (Haddy, A. (1099) 25)

G-site
GSH transferase π; Spin-labelled glutathione; EPR; Glutathione (Caccuri, A.M. (1122) 265)

GSTπ
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GTP
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Guanylate cyclase; (*Dictyostelium*) (Schulkes, C.C.G.M. (1135) 73)

GTP analog
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GTP-binding protein
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Elongation factor G; Inhibitor; (*E. coli*) (Nagel, K. (1129) 145)

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Glucose-6-phosphate dehydrogenase; Denaturation; Denaturation intermediate; Enzyme conformation (Plomer, J.J. (1122) 234)

Guanine nucleotide
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Guanylate cyclase
GTP; (*Dictyostelium*) (Schulkes, C.C.G.M. (1135) 73)

Guanylyl cyclase
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Halorhodopsin
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Haptoglobin receptor
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HDL
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HDL modification
Malondialdehyde; Cholesterol efflux; HDL binding; Fibroblast; Atherosclerosis (Salmon, S. (1125) 230)

HDL receptor
HDL; Macrophage; Foam cell; Cholesteryl ester (Miyazaki, A. (1126) 73)

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Helix formation
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Hematoporhyrin derivative
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Hematoporphyrin derivative
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Heme oxygenase isozyme
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Haptoglobin receptor; Heme oxygenase; (Human hepatoma cell); (Human hepatocyte) (Okuda, M. (1136) 143)

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Hemoglobin model
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Hemolysis
Hemin; Desferrioxamine; Red cell (Sullivan, S.G. (1104) 38)

Avidin; Multipoint binding; Biotinylated membrane; Biotin-binding site; Erythrocyte membrane; Complement (Muzykantov, V.R. (1107) 119)

Hemoglobin; Unstable hemoglobin; Anemia; Deamidation; Oxygen affinity (Wajcman, H. (1138) 127)

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Heparan sulfate proteoglycan
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Interferon-γ; Heparan sulfate; Binding site (Lortat-Jacob, H. (1117) 126)

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Lipoprotein lipase; Triacylglycerol emulsion (Hultin, M. (1125) 97)

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Lipoprotein lipase activity; LPL mRNA; cyclic AMP; Cholera toxin; Heart-cell culture; (Rat heart mesenchymal cell) (Friedman, G. (1137) 237)

Heparin binding
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Heparin-binding growth factor
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Hepatic cholic acid
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Lipoprotein lipase; Hepatocyte; (Rat) (Peinado-Onsurbe, J. (1125) 82)

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Plasma membrane; Membrane potential; Mitochondrion; Tetraphenylphosphonium; Amphotericin B (Saito, S. (1111) 221)

Lipoprotein lipase; Hepatic lipase; (Rat) (Peinado-Onsurbe, J. (1125) 82)

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NMR, ^{31}P-; Hepatotoxicity; Ethanol; Acetaminophen; Allyl alcohol; Fructose; Agarose thread (Farghali, H. (1139) 105)

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Hepatotoxicity
NMR, ^{31}P-; Hepatocyte; Ethanol; Acetaminophen; Allyl alcohol; Fructose; Agarose thread (Farghali, H. (1139) 105)

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Herbicide resistance
Chlorophyll fluorescence decay; Photosystem II; Electron acceptor complex; D1 mutant; (*Chlamydomonas reinhardtii*) (Govindjee, (1101) 353)

12-HETE
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***hydH* gene**
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High affinity ligand binding
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High-affinity toxin-binding site
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High-density lipoprotein
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High enzyme concentration
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Histamine H_1
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Histidine
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Histidine decarboxylase mRNA
Histidine decarboxylase; Dexamethasone; 12-*O*-Tetradecanoylphorbol-13-acetate (Kawai, H. (1133) 172)

Histidine decarboxylase; cyclic AMP; Calcium (Miyazaki, T. (1133) 179)

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Internal nuclear matrix; Histone acetylation (Hendzel, M.J. (1130) 307)

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Histone structure
Histone H1; Protein conformation; (Rat liver); (Rat testis) (Baubichon-Cortay, H. (1122) 167)

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HIV glycoprotein 41 000 (gp41)
HIV; AIDS; Cytolysis; Hemolysis; Virus (Mobley, P.W. (1139) 251)

Circular dichroism; FTIR; Electron spin resonance; HIV; AIDS; Fusion; Lysis (Gordon, L.M. (1139) 257)

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Hofmeister effect
Photosystem II; Thermal stability; Chloroplast; Electron transport; Oxygen evolution (Williams, W.P. (1100) 92)

Homeobox
Cell surface; Gene expression; *Hox-3.3*; Aqueous two-phase system; Transfection; (Mouse) (Shimeld, S.M. (1136) 253)

Homeobox gene
Homeodomain protein; HOX4A; *zerknullt*; pp60$^{c\text{-}src}$; (Human) (Taniguchi, Y. (1132) 332)

Homeodomain protein
Homeobox gene; HOX4A; *zerknullt*; pp60$^{c\text{-}src}$; (Human) (Taniguchi, Y. (1132) 332)

Homeostasis, Ca^{2+}-
Membrane lipid composition; Lipid synthesis; Triacylglycerol; Membrane fluidity; Phosphatidylcholine (Kerler, F. (1139) 57)

Homeoviscous adaptation
Fluorescence anisotropy; DPH; Myelin; Membrane fluidity; Pressure adaptation (Behan, M.K. (1103) 317)

Fibroblast; Membrane lipid; Membrane fluidity; Fluorescence anisotropy (Sojcic, Z. (1104) 31)

Homing device glu-plasminogen
Liposome; Glu-plasminogen; Protein thiolation (Heeremans, J.L.M. (1117) 258)

Homoserine dehydrogenase
Kinetic mechanism; Aspartokinase-homoserine dehydrogenase I; Equilibrium isotope exchange kinetics; (*E. coli*) (Wedler, F.C. (1119) 247)

Hormonal regulation
Corticosteroid receptor; Adipocyte; (Rat) (Pedersen, S.B. (1134) 303)

Hormone
Growth factor; NADH oxidase; Growth; Plasma membrane; (Rat liver) (Brightman, A.O. (1105) 109)

Hormone-calcium complex
Insulin; Calcium ion transport; Liposome; Insulin–receptor interaction (Brimble, K.S. (1105) 319)

Hormone receptor
Glycoprotein hormone; Pituitary; Placenta; Signal transduction; Receptor binding; Gene expression; DNA sequence (Dias, J.A. (1135) 287)

Hormone regulation
Drug metabolism; Cytochrome *P*-450; Sexual differentiation; Growth hormone; Xenobiotic metabolism (Henderson, C.J. (1118) 99)

Horseradish peroxidase
Antigen–antibody affinity constant; Liquid–liquid partition (Winzor, D.J. (1115) 141)

Dextran; Conjugation; Stability; Liposome (Mumtaz, S. (1117) 174)

Taurolithocholate; Biliary lipid excretion; Bile salt excretion; (Rat) (Marinelli, R.A. (1125) 44)

Cytochrome *b*-561; Ascorbic acid; Chromaffin vesicle; Electron transfer (Harnadek, G.J. (1135) 280)

Housekeeping gene
Nucleotide synthesis; Phosphoribosyl pyrophosphate synthetase; Ribose-phosphate pyrophosphokinase; Cell-specific expression; Promoter region; (Human) (Ishizuka, T. (1130) 139)

hox
DNA sequencing; Hydrogen oxidation; Redox; Electron carrier; Ni, FeS cluster; Protein assembly (Chen, J.C. (1131) 122)

Hox-3.3
Cell surface; Gene expression; Homeobox; Aqueous two-phase system; Transfection; (Mouse) (Shimeld, S.M. (1136) 253)

HOX4A
Homeobox gene; Homeodomain protein; *zerknullt*; pp60$^{c\text{-}src}$; (Human) (Taniguchi, Y. (1132) 332)

15-HPETE
Endothelial cell injury; Lipid peroxidation; Antioxidant; Radical scavenger; Iron chelator (Ochi, H. (1136) 247)

HPLC
Chlorophyll *a'*; Photosystem I; Reaction center (Maeda, H. (1099) 74)

Atrial natriuretic peptide; ANP; Degradation; CPA47 cell; Endothelial cell (Frost, S.J. (1112) 45)

D-Alanine; D-Proline; D-Serine; D-Isomer (Nagata, Y. (1115) 208)

Decay-accelerating factor; Short consensus repeat; Disulfide bond (Nakano, Y. (1116) 235)

NMR; Mass spectrometry, FAB; Quinone; Pyrroloquinoline quinone (Buffoni, F. (1116) 297)

Thymosin; Peptide; IEF (Franco, F.J. (1120) 43)

Protein characterization; Tryptic peptide; Ribonuclease inhibitor (Crevel-Thieffry, I. (1122) 107)

Amino acid sequence; Fatty acid ω-hydroxylase; Cytochrome *P*-450; Rat kidney microsome; (Human kidney microsome) (Kawashima, H. (1123) 156)

Unilamellar vesicle; Lipid peroxidation; Membrane; Unsaturated fatty acid; Liposome preparation (Salgo, M.G. (1127) 131)

H^+-ATPase; Detergent solubilisation; Electron microscopy; Tonoplast; (*B. Vulgaris*) (Ellis, C.M. (1136) 319)

HPRT
Photosynthetic bacteria; DNA sequence; Phosphoribosyltransferase; Lesch-Nyhan syndrome (Beckman, D.L. (1129) 112)

HSA
Prostacyclin; HDL; Stabilization mechanism; Apo A-I (Tsai, A.-l. (1115) 131)

H secretion
Cytosolic pH; Na-H exchange; Rabbit collecting tubule; Isoproterenol (Dagher, G. (1133) 17)

α_2-HS-glycoprotein
Fetuin; Gene regulation; mRNA; Development (Yang, F. (1130) 149)

Hsp47
Collagin; cDNA sequence; Gp46; Collagen-binding protein (Clarke, E.P. (1129) 242)

***hsp82* gene**
Transcription; Fungal morphogenesis (Minchiotti, G. (1131) 103)

HSP90 overexpression
Heat shock; Thermotolerance; (*S. cerevisiae*) (Cheng, L. (1132) 26)

HSP60 sequence
GroEL operon; Polymerase chain reaction; (*C. perfringens*) (Rusanganwa, E. (1130) 90)

HSP70 sequence
dnaK gene; Polymerase chain reaction; (*C. perfringens*) (Galley, K.A. (1130) 203)

HTC cell
Polyamine; Spermidine; Spermine; Putrescine; Polyamine transport; DH23b cell; α-Difluoromethylornithine; Polyamine feedback; Polyamine toxicity; Ornithine decarboxylase overproducer (Mitchell, J.L.A. (1136) 136)

htrP
DNA topoisomerase; Compensatory mutation (Yang, T.-P. (1130) 227)

HuH-7
Hepatoma cell-line; Plasminogen activator; Plasminogen activator inhibitor-1; Urokinase; Fibrinolytic system (Arndt, A. (1138) 149)

Human airway epithelium
Essential fatty acid; Incorporation; Desaturation; Fatty acid composition (Kang, J.X. (1128) 267)

Human embryonic fibroblast
Tissue plasminogen activator; Proteose peptone; Induction; Arachidonic acid; Lipoxygenase (Suzuki, A. (1133) 167)

Human epidermal growth factor receptor
Epidermal growth factor; Site-directed mutagenesis; Protein engineering; NMR (Koide, H. (1120) 257)

Human fibroblast
Glucose transport; Phorbol ester; Insulin; Glucose transporter (Longo, N. (1104) 24)

Niemann-Pick disease; Cholesterol esterification; Cholesterol mass; 25-Hydroxycholesterol; Acyl-CoA : cholesterol acyltransferase (Sidhu, H.S. (1124) 29)

Niemann-Pick disease; Acyl-CoA : cholesterol acyltransferase; Sphingomyelinase (Byers, D.M. (1138) 20)

Human histocompatibility antigen B2701
Bacterial outer membrane protein; OmpH; Nucleotide sequence; Histocompatibility antigen; Sequence homology; (*Yersinia pseudotuberculosis*) (Vuorio, R. (1129) 124)

Human lens
Aging; Cataractogenesis; Fluorescence; Non-enzymatic glycation (Nagaraj, R.H. (1116) 34)

Human neutrophil elastase
Collagen type VIII; Collagen type X (Kittelberger, R. (1139) 295)

Human platelet
Calcium pump; ATPase, $(Ca^{2+} + Mg^{2+})$-; Chlorotetracycline; Quin2; Protein kinase C; Phorbol 12-myristate 13-acetate; Calphostin C (Tao, J. (1107) 213)

Human serum albumin
Hypericin; Photosensitization; Red cell ghost; Lysozyme (Senthil, V. (1115) 192)

Genetic variant; Isoelectric focusing; Amino acid sequence; Point mutation (Minchiotti, L. (1119) 232)

Human skin fibroblast
Cystic fibrosis; Membrane vesicle; Chloride transport (Vasseur, M. (1139) 41)

Human synovial fluid
Phospholipase A_2; Alkylacylglycerophosphocholine; Arachidonate metabolism; Phosphatidylcholine (Cabré, F. (1124) 297)

Human trophoblast cell
Copper ion; Placental transport (Mas, A. (1135) 123)

Human tumor
tRNA-guanine transglycosylase; Queuine; Queuosine; DNA methylation; 5-Azacytidine (Gündüz, U. (1139) 229)

Hyaluronan
Insulin-like growth factor-I, IGF-1; Articular cartilage; Proteoglycan; Aggrecan; Link protein; (Human) (Curtis, A.J. (1135) 309)

Hyaluronate
Werner's syndrome; Skin fibroblast (Nakamura, T. (1139) 84)

Hybrid-arrest method
Oocyte; Calcium channel; RNA; (*X. laevis*) (Singer-Lahat, D. (1137) 39)

Hybrid cell
Biotin-containing enzyme; Tumorigenicity; Pyruvate carboxylase (Bramwell, M.E. (1139) 115)

***hydG* gene**
DNA sequencing; *hydH* gene; T7 polymerase/promoter system (Chopra, A.K. (1129) 115)

Hydration force
Lipid vesicle; Drug carrier; Topical application; Osmotic gradient; Dermal transport (Cevc, G. (1104) 227)

Hydrazine
Methylamine dehydrogenase; Quinoprotein; Tryptophan tryptophylquinone; Enzyme inactivation (Davidson, V.L. (1121) 104)

Hydride transfer
Glutamate dehydrogenase; Proton release; Enzyme kinetics (Fisher, H.F. (1119) 52)

Hydrocortisone
Intestine; Weaning; Fucosyl-transferase; (RU 38486) (Biol, M.-C. (1133) 206)

Hydrogenase
Nickel; Iron-sulfur; Redox potential; (*M. thermoautotrophicum*); (*C. vinosum*) (Coremans, J.M.C.C. (1119) 148)

Nickel; Iron-sulfur cluster; Redox potential; (*C. vinosum*) (Coremans, J.M.C.C. (1119) 157)

DNA sequencing; Ni, FeS cluster; Protein assembly; Electron carrier; (*A. vinelandii*) (Chen, J.C. (1131) 199)

Hydrogen bond
Cytochrome *P*-450$_{cam}$; Amino acid substitution; Energy minimization (Yoshikawa, K.-i. (1122) 41)

Hydrogen bonding
Alcohol–membrane interaction; Dehydration; FTIR (Chiou, J.-S. (1110) 225)

X-ray absorption spectroscopy; DNA structure (Kirtley, S.M. (1132) 249)

Hydrogen exchange
Cytochrome; NMR; (*Pseudomonas*) (Timkovich, R. (1121) 8)

Polynucleotide; Base pairs opening kinetics; Stopped-flow measurement (Girardet, J.-L. (1130) 127)

Hydrogen ion
Diffusion; Mucus; Permeability; (In vitro study) (Desai, M.A. (1116) 43)

Hydrogen oxidation
DNA sequencing; Redox; Electron carrier; Ni, FeS cluster; Protein assembly; *hox* (Chen, J.C. (1131) 122)

Hydrogen peroxide
Amiloride; Xanthine oxidase; Sodium ion channel (Bauer, M.L. (1104) 87)

Acetaldehyde; Soybean seedling; Hydroperoxy intermediate; Chemiluminescence; Emission spectrum (Watanabe, H. (1117) 107)

Free radical; Nitroxide free radical; Cellular hydrogen peroxide; (Human tumor cell) (Voest, E.E. (1136) 113)

Hydrogen peroxide metabolism
Lens; Cataract; Enzyme activity; GSH deficiency; Lipid peroxidase; (Human); (Rabbit); (Mouse) (Babizhayev, M.A. (1138) 11)

Hydrolysis
Phospholipase D; Oil/water interface; Phosphatidylcholine monolayer; Phosphatidic acid monolayer (Kondo, T. (1124) 1)

Radical damage; Endocytosis; Protein; Proteolysis (Grant, A.J. (1134) 203)

Hydrolytic domain
Proteolysis; Raw-starch-digesting amylase; Amylase; Subtilisin digestion; Peptide; Active site; (*B. circulans* F-2) (Kim, C.-H. (1122) 243)

Hydroperoxide
Radical; EPR; Cytochrome *P*-450; Spin trapping; Peroxyl; Alkoxyl (Greenley, T.L. (1116) 192)

Lipoxygenase; Cyclooxygenase; Oxygenase; Arachidonic acid; Prostaglandin; Leukotriene; Enzyme immunoassay; Complementary DNA (Yamamoto, S. (1128) 117)

Hydroperoxide specific assay
Chemiluminescence-HPLC; Phosphatidylcholine hydroperoxide; Phytoalexin induction; (Soybean) (Kondo, Y. (1127) 227)

Hydroperoxy intermediate
Acetaldehyde; Soybean seedling; Hydrogen peroxide; Chemiluminescence; Emission spectrum (Watanabe, H. (1117) 107)

Hydrophobic anchor group
Proteoliposome; Integral membrane protein; Dextran derivative (Elferink, M.G.L. (1106) 23)

Hydrophobic chromatography
Protein purification; Lysozyme; α-Lactalbumin; Metalloprotein; Protein conformation (Haezebrouck, P. (1122) 305)

Hydrophobic interaction chromatography
Lipase; Enzyme purification; (*P. simplicissimum*) (Sztajer, H. (1124) 253)

Hydrophobic labeling
ATPase, H^+-; TID, [^{125}I]-; Cyanogen bromide digestion; Tryptic digestion; Membrane topology; Yeast (Seto-Young, D. (1102) 213)

Hydrophobic surfactant protein
Surfactant protein; Lipid mixing; Pulmonary surfactant (Oosterlaken-Dijksterhuis, M.A. (1110) 45)

Hydrophobic thiosaccharide
Lectin; D-Galactose; Equilibrium dialysis; Hemagglutination; (*P. aeruginosa*) (Garber, N. (1116) 331)

Hydrostatic pressure
Nucleoside transport; Nitrobenzylthioinosine; Erythrocyte; Membrane transport (Hall, A.C. (1105) 300)

Anesthetic; Polylysine; Thermotropic (Chiou, J.-S. (1119) 211)

5-Hydroxybenzimidazolyl cobamide
Methyltransferase; 5,6,7,8-Tetrahydromethanopterin; Coenzyme M; Methanogenesis; (*M. thermoautotrophicum*) (Kengen, S.W.M. (1118) 249)

25-Hydroxycholesterol
Niemann-Pick disease; Cholesterol esterification; Cholesterol mass; Acyl-CoA : cholesterol acyltransferase; Human fibroblast (Sidhu, H.S. (1124) 29)

Hydroxyeicosa, see Hydroxyicosa

2-Hydroxyestradiol
Tyrosinase; Melanin; Estradiol; Estradiol-2,3-quinone; Dopa; Melanosome (Jacobsohn, G.M. (1116) 173)

Hydroxyethyl substituent
Vinyl substituent; Allomerization; Pyro-bacteriochlorophyll; Hydroxy substituent; Water elimination; Enolization; Photosynthesis (Struck, A. (1101) 321)

β-Hydroxy fatty acid
Surfactin; β-Amino fatty acid; Iturin; Bacillomycin; Mycosubtilin; (*B. subtilis*) (Besson, F. (1123) 51)

8-Hydroxyicosatetraenoic acid
Lipoxygenase; Prostaglandin; Icosanoid; (*C. maenas*) (Hampson, A.J. (1124) 143)

Hydroxylamine
Phosphatidylinositol; Acetylcholinesterase; Erythrocyte; Lymphocyte; Glycolipid anchor (Richier, P. (1112) 83)

17α-Hydroxylase
Nucleotide sequence; (Rg)(Rat) (Zhang, P. (1131) 345)

17α-Hydroxylase deficiency; 17,20-Lyase deficiency; Cytochrome *P*-450$_{17\alpha}$; Congenital adrenal hyperplasia (Yanase, T. (1139) 275)

17α-Hydroxylase deficiency
17,20-Lyase deficiency; 17α-Hydroxylase; Cytochrome *P*-450$_{17\alpha}$; Congenital adrenal hyperplasia (Yanase, T. (1139) 275)

17α-Hydroxylase / C-17,20-lyase cytochrome *P*-450
cDNA; (Porcine) (Conley, A.J. (1130) 75)

Hydroxylation
Cholesterol; GC-MS; (Liver microsome) (Björkhem, I. (1128) 73)

Hydroxyl radical
Site specificity; Free radical; Salicylate; Dihydroxybenzoate; Phenylalanine (Gelvan, D. (1116) 183)

3-Hydroxy-3-methylglutaryl CoA (HMG-CoA) synthase cDNA
Cholesterol biosynthesis; Isoprenoid biosynthesis; (Human) (Russ, A.P. (1132) 329)

4-Hydroxynonenal
Sphingosine; Phospholipase D; Phospholipid hydrolysis (Kiss, Z. (1124) 300)

4-Hydroxy-3-oxobutyl-1-phosphonate
(*sn*)-Glycerol-3-phosphate acyltransferase; (*S*)-3,4-Dihydroxybutyl-1-phosphonate; (*S*)-3-Hydroxy-4-oxobutyl-1-phosphonate; 1,3,4-Trihydroxybutyl-1-phosphonate (Stein, T.A. (1123) 249)

(*S*)-3-Hydroxy-4-oxobutyl-1-phosphonate
(*sn*)-Glycerol-3-phosphate acyltransferase; (*S*)-3,4-Dihydroxybutyl-1-phosphonate; 4-Hydroxy-3-oxobutyl-1-phosphonate; 1,3,4-Trihydroxybutyl-1-phosphonate (Stein, T.A. (1123) 249)

11β-Hydroxysteroid dehydrogenase
Corticosteroid 11-oxidation; Glycyrrhetinic acid; Bireactant kinetics (Monder, C. (1115) 23)

17β-Hydroxysteroid dehydrogenase
Essential amino acid residue; Chemical modification; (Mouse liver) (Nakayama, T. (1120) 144)

Hydroxy substituent
Vinyl substituent; Hydroxyethyl substituent; Allomerization; Pyrobacteriochlorophyll; Water elimination; Enolization; Photosynthesis (Struck, A. (1101) 321)

***N*-Hydroxysuccinimide ester**
Doxorubicin; Self-association; Transferrin; Albumin; Immunoglobulin (Demant, E.J.F. (1118) 83)

Hydroxyurea
Apoptosis; Cell death; DNA fragmentation; Burkitt's lymphoma (Johnson, C.A. (1136) 1)

Hypercholesterolemia
β-VLDL; Bile acid; Lipoprotein uptaken; (Hepatocyte (ExHC rat)) (Imaizumi, K. (1123) 101)

Plasma lipoprotein; Cholesterol; (Chicken) (Hermier, D. (1124) 178)

Dietary amino acid; LDL receptor; (Rabbit liver) (Kurowska, E.M. (1126) 185)

Apolipoprotein B-100; LDL receptor binding; LDL turnover; (Cynomolgus monkey) (Spilman, C.H. (1128) 26)

Albumin; mRNA; (Rabbit liver) (Crespo, P. (1128) 77)

Hyperfine shift
NMR; Nuclear Overhauser effect; Myoglobin; Heme vinyl group (Yamamoto, Y. (1120) 173)

Hypericin
Photosensitization; Red cell ghost; Human serum albumin; Lysozyme (Senthil, V. (1115) 192)

Hyperlipidemia
C/EBP; Gene expression; Hypolipidemic drug; Transcription factor (Staels, B. (1123) 227)

Pregnancy; Docosahexaenoic acid; Adipose tissue; Fetus (Chen, Z.-Y. (1127) 263)

Apolipoprotein A-IV genetic polymorphism; Plasma lipid; Plasma lipoprotein (Tenkanen, H. (1138) 27)

Hyperlipoproteinemia
Lipoprotein lipase; Amino acid sequence; cDNA sequence; Mutation; Kinetics (Wang, C.-S. (1123) 1)

Hyperoxaluria
Hepatoma cell; Hepatoblastoma cell line; HepG2; Peroxisome; (Human liver) (Wanders, R.J.A. (1115) 54)

Hyperpipecolic acidemia
Pipecolate oxidase; Peroxisomal; Zellweger (Rao, V.V. (1139) 189)

Hypertension
Atherosclerosis; Endothelium; Endothelin; Vasoconstrictor; (Rabbit) (Marsden, P.A. (1129) 245)

Collagen; Aorta; SHRSP (Matsumura, S. (1139) 1)

Hyperthermophile
Glutamate dehydrogenase; Enzyme purification; Enzyme characterization; Archaebacterium; (*P. furiosus*) (Robb, F.T. (1120) 267)

tRNA gene; Archaeon; Methanogen; Promoter (Palmer, J.R. (1132) 315)

Hyperthyroid
Triiodothyronine; Hypothyroid; Hepatocyte; Respiratory capacity; Thyroid hormone (Gregory, R.B. (1098) 61)

Reducing-equivalent transfer; Ureogenesis; Hypothyroid; (Isolated rat hepatocyte) (Gregory, R.B. (1137) 34)

Hypertriglyceridemia
Lipoprotein; Apolipoprotein; Sepsis (Lanza-Jacoby, S. (1124) 233)

Hypobetalipoproteinemia
Cholesterol; Heterozygote; Immunoblotting; DNA sequencing (McCormick, S.P.A. (1138) 290)

Hypocholesterolemia
Interleukin-1α; Tumor necrosis factor (Ettinger, W.H. (1128) 186)

Hypolipidemic drug
Lipoprotein metabolism; Cholestyramine; (Syrian hamster) (Groot, P.H.E. (1123) 76)

C/EBP; Gene expression; Hyperlipidemia; Transcription factor (Staels, B. (1123) 227)

Hyposmosis
Attached cell; Potassium ion channel; Regulatory volume change; Cell water (Ikehara, T. (1111) 151)

Hyposmotic challenge
A6 cell; Basolateral potassium ion conductance; Potassium ion conductance; Microelectrode (Granitzer, M. (1110) 239)

Hypothyroid
Triiodothyronine; Hyperthyroid; Hepatocyte; Respiratory capacity; Thyroid hormone (Gregory, R.B. (1098) 61)

Reducing-equivalent transfer; Ureogenesis; Hyperthyroid; (Isolated rat hepatocyte) (Gregory, R.B. (1137) 34)

Hypotonic hemolysis
Aminophospholipid translocase; Spin label; EPR; (Human erythrocyte) (Schrier, S.L. (1105) 170)

Hypotonicity
Intestinal chloride secretion; T_{84} (McEwan, G.T.A. (1135) 180)

Hypoxia
PAF; Endothelial cell; Phospholipase A_2; Acetylhydrolase (Caplan, M.S. (1128) 205)

Endothelin-1 (Wiebke, J.L. (1134) 105)

Iron absorption; Mouse intestine; Iron deficiency; Ferricyanide; Ferrozine (Raja, K.B. (1135) 141)

Hysteresis
Glucose-6-phosphatase; Microsome; Phosphotransferase; Inorganic pyrophosphatase; (Mouse liver) (Foster, J.D. (1118) 91)

60 Hz
Magnetic field; Transcription; T-lymphoblastoid cell; c-*fos*; c-*myc*; c-*jun*; Protein kinase C (Phillips, J.L. (1132) 140)

I

iC3b
Liposome; Phosphatidylcholine, hydrogenated; Drug carrier; Stability; Plasma; Alternative complement pathway; Opsonin; (Rat) (Funato, K. (1103) 198)

Icosanoid
Cytochrome *P*-450; Metabolism; Rat liver microsome; Epoxygenase (Jajoo, H.K. (1123) 110)

Lipoxygenase; 8-Hydroxyicosatetraenoic acid; Prostaglandin; (*C. maenas*) (Hampson, A.J. (1124) 143)

Pancreas islet; Insulin; Arachidonic acid metabolism; (Rodent); (Human) (Turk, J. (1125) 280)

12-Lipoxygenase; Inflammation; Chemotaxis; Carbonyl derivative (Naccache, P.H. (1133) 102)

Platelet; Polymorphonuclear leukocyte; Calcium ionophore A23187; 12-HETE (McCulloch, R.K. (1133) 142)

Icosanoyl-CoA synthase
Lipid; Acyl-CoA; Very long chain fatty acid (VLCFA); Antibody; Elongating system; (*Allium porrum*) (Bessoule, J.-J. (1117) 78)

Icosapentaenoic acid
Fish oil; Fatty acid, $n-3$; Docosahexaenoic acid; Intestinal absorption (Herzberg, G.R. (1124) 190)

Fatty acid oxidation; Desaturase, Δ^5-, Δ^6-;; Docosahexaenoic acid; (Rat hepatocyte) (Grønn, M. (1125) 35)

Reproduction; Prostaglandin E_3; Cytochrome *P*-450; GC-MS (Oliw, E.H. (1126) 261)

Hepatocyte; Choline phosphoglyceride; Ethanolamine phosphoglyceride; Fatty acid metabolism; Retroconversion; Arachidonic acid (Voss, A. (1127) 33)

Lipid peroxidation; Lipoxygenase activity; Glutathione; Vitamin E; (Human platelet) (Calzada, C. (1127) 147)

Icosapentaenoic acid ethyl ester
Intravenous infusion; Fatty acid composition; $(n-3)$ Polyunsaturated fatty acid; Plasma lipid; Emulsion; (Rat liver); (Rat heart) (Yamazaki, K. (1128) 35)

Icosatetraynoic acid
Membrane fluidity; Arachidonic acid; Molecular modeling; DNA synthesis inhibition; Electron microscopy; Steady state fluorescence (Brown, M. (1105) 285)

IEF
Thymosin; Peptide; HPLC (Franco, F.J. (1120) 43)

IF-cbl
Cobalamin binding protein; Eukaryotic expression (Gordon, M. (1132) 276)

Ileum
Bile acid transport; Chemical modification; Photoaffinity labeling; Small intestine; (Rabbit) (Kramer, W. (1111) 93)

Iloprost
Prostaglandin E_2; Prostacyclin; Sarcolemma; (Heart) (Lerner, R.W. (1105) 189)

Image analysis
ATP synthase; Electron microscopy; Chloroplast (Boekema, E.J. (1098) 131)

GroEL-like protein; Glutamine synthetase; Protein structure; Protein–protein interaction; Electron microscopy; (Pea) (Tsuprun, V.L. (1099) 67)

Ribosome; Electron microscopy; (Thermophile); (*Thermus aquaticus*) (Harauz, G. (1129) 207)

Ribosome; Thermophile; Fungus; Electron microscopy (Harauz, G. (1130) 289)

Ribosome; Thermophile; Electron microscopy; (Fungus) (Harauz, G. (1132) 58)

Image processing
Bacteriophage; Baseplate; Structural organization; Recognition; Infection process; DNA ejection; Electron microscopy (Khusainov, A.A. (1117) 237)

Imidazolinone
Cyclic nucleotide phosphodiesterase; Enzyme purification; Spermatogenesis; Kinetics; (Mouse germ cell) (Giorgi, M. (1121) 178)

Imino acid
Transport; Brush border membrane; Gradient; Amino acid; (Rabbit jejunum); (Rabbit ileum) (Munck, L.K. (1116) 83)

Intestinal transport; Proline; Imino acid carrier; (Rabbit intestine) (Munck, L.K. (1116) 91)

Imino acid carrier
Intestinal transport; Imino acid; Proline; (Rabbit intestine) (Munck, L.K. (1116) 91)

Immobilized-phosphoprotein
Phosphatase; Neutrophil (Ding, J. (1133) 235)

Immunoaffinity
Thromboxane; Prostacyclin; Prostaglandin E_2; Urine; Platelet; Vessel; Kidney; Aspirin; Gas chromatography-mass spectrometry (Chiabrando, C. (1133) 247)

Immunoaffinity chromatography
Tissue-type plasminogen activator; Monoclonal antibody (Bos, R. (1117) 188)

Lipoprotein; Lipoprotein A-II; Lipid; Apolipoprotein; (Human plasma) (Bekaert, E.D. (1126) 105)

Abetalipoproteinemia; HDL subpopulation; LCAT; Lipid; Metabolism (Cheung, M.C. (1128) 244)

Immunoblot
Photoperoxidation; HDL; Apolipoprotein A-I; Apolipoprotein A-II; SDS-PAGE; Monoclonal antibody (Salmon, S. (1128) 167)

Immunoblot analysis
Photosystem II; Reaction center; Protein photolysis; Ultraviolet-B radiation; Absorbance difference spectrophotometry; (Spinach thylakoids) (Melis, A. (1100) 312)

Immunoblotting
Calpain; Proteinase; Proteolysis (Croall, D.E. (1121) 47)

Ribonuclease; Antipeptide antibody; Multiplicity; (Human urine) (Yasuda, T. (1121) 331)

Cholesterol; Hypobetalipoproteinemia; Heterozygote; DNA sequencing (McCormick, S.P.A. (1138) 290)

Immunochemical reactivity
Fungal peroxidase; Glycosylation (Kjalke, M. (1120) 248)

Immunochemistry
Toxicology; Protein characterization; Cytochrome *P*-450; (Human fetal liver) (Kitada, M. (1117) 301)

Immunodetection
Unsaturated fatty acid; Heparin; α-Fetoprotein; Protein conformation; Estrogen binding; (Human) (Haourigui, M. (1125) 157)

Immunofluorescence
Myoepithelial cell; Proteoglycan; Structural analysis; Immunolocalization; (mammary gland) (Warburton, M.J. (1117) 291)

Immunoglobulin
Doxorubicin; *N*-Hydroxysuccinimide ester; Self-association; Transferrin; Albumin (Demant, E.J.F. (1118) 83)

Immunoglobulin E
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Immunohistochemistry
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Immunolocalization
Myoepithelial cell; Proteoglycan; Structural analysis; Immunofluorescence; (mammary gland) (Warburton, M.J. (1117) 291)

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Immunosuppression
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Inactivation kinetics
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Indomethacin
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Cytochrome *P*-450 (P-450IIIa); cDNA sequence; Dexamethasone; Cloning; (Mouse liver) (Yanagimoto, T. (1130) 329)

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T-kininogen; Acute phase protein; Monoclonal antibody; Thyroidectomy; (Rat) (Bouhnik, J. (1122) 70)

12-Lipoxygenase; Icosanoid; Chemotaxis; Carbonyl derivative (Naccache, P.H. (1133) 102)

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Inflorescence
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Influenza virus
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Infrared spectroscopy
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Adenosine deaminase; Yeast; Coformycin; Deoxycoformycin (Lupidi, G. (1122) 311)

Lipoxygenase; Alcohol; Thiol; Alkyl compound (Kuninori, T. (1125) 49)

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Inorganic pyrophosphatase
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Inositol phosphate
cyclic AMP; Calcium ionophore; Antigen; Agonist; (Rat RBL-1 cell) (Galadari, S.H.I. (1133) 218)

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Spontaneous diabetes; Microsomal desaturase; Fatty acid; (Rat liver) (Mimouni, V. (1123) 296)

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Spontaneous diabetes; γ-Linolenic acid; Microsomal chain elongation; (Liver); (BB rat) (Mimouni, V. (1133) 187)

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Insulin chain
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α_1-Antitrypsin; Plasma; ATPase, Na^+/K^+-; Protein purification; (Human) (Finotti, P. (1139) 122)

Insulin-dependent diabetes mellitus
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Insulin-like growth factor-I, IGF-1
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Insulin-like growth factor II receptor
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Insulin mediator precursor PI-glycan
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Insulin receptor
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Insulin mediator precursor PI-glycan; Pyruvate dehydrogenase; Glucose transport (Macaulay, S.L. (1134) 53)

Insulin–receptor interaction
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Insulin response
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Insulin secretion
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Insulin therapy
Cell membrane; Platelet; Insulin-dependent diabetes mellitus; Gestational diabetes mellitus (Mazzanti, L. (1139) 65)

Integral membrane protein
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Interfacial pH
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Interfacial phenomenon
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Bradykinin; Arthritis; Inflammation; Osteoblast-like cell; Prostaglandin E_2; Interleukin-6; (Human) (Rahman, S. (1135) 97)

Articular chondrocyte; Purinoceptor, P_2; Prostaglandin E (Caswell, A.M. (1137) 52)

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Interleukin 1 receptor
Interleukin 1; Phenylglyoxal; Protein modification; Receptor binding assay; (EL-4 cell) (Nanduri, V.B. (1118) 25)

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Intestinal absorption
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Intestinal epithelium
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Intestinal iron absorption
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Intestinal mucosa
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N-Formylmethionine aminopeptidase; Bioactive peptide (Sherriff, R.M. (1119) 275)

Δ^6-Desaturase; Arachidonic acid; Dietary fat; Fasting; Fatty acid composition (Garg, M.L. (1126) 17)

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5-Nitro-2-(-3-phenylpropylamino)benzoic acid; Chloride channel; Choride transport; Nonspecific effect (Keeling, D.J. (1115) 42)

Intestinal sugar transport
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Intestinal transport
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Intracellular oxygen
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ATPase, Na^+/K^+-; pH, intracellular; Intracellular calcium; Intracellular sodium; Ouabain; (Frog skin epithelium) (Ehrenfeld, J. (1106) 197)

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Intracellular sodium
ATPase, Na^+/K^+-; pH, intracellular; Intracellular pH; Intracellular calcium; Ouabain; (Frog skin epithelium) (Ehrenfeld, J. (1106) 197)

Intracellular sodium ion
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Intracisternal A particle
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Intrinsic tryptophan fluorescence
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Intron
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Inverted hexagonal phase of lipids
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Inverted PCR
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Mitochondrial channel; Mitochondrial membrane; Permeability; Patch clamp; Amiodarone; (Rat heart) (Zorov, D.B. (1105) 263)

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Local anesthetic; Anesthetic; Gramicidin; Lipid bilayer (Bridal, T.R. (1107) 31)

Duramycin; Black lipid membrane; Epithelium; Colon; (*Streptoverticillium*) (Sheth, T.R. (1107) 179)

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Ion conductance
Epithelium; Basolateral membrane; Potassium ion channel; Volume regulation (Backman, K. (1105) 89)

Ion flux response
Nicotinic acetylcholine receptor; Fourier transform; Protein–lipid interaction; Cholesterol; Affinity-state transition; (*T. californica*) (Sunshine, C. (1108) 240)

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Purine nucleoside phosphorylase; Substrate/inhibitor property; Formycin A; Formycin B; Structure-activity relationship; Tautomeric form; (*E. coli*) (Bzowska, A. (1120) 239)

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Iron-binding polypeptide
Iron-binding; Non-transferrin-bound iron; Serum iron (Stojkovski, S. (1137) 155)

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Iron absorption; Mouse intestine; Hypoxia; Ferricyanide; Ferrozine (Raja, K.B. (1135) 141)

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Lactoferrin
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LDL turnover
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λgt11
Δ^3, Δ^2-Enoyl-CoA isomerase; cDNA; λgt10; β-Oxidation; (Rat liver) (Tomioka, Y. (1130) 109)

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Lung surfactant
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M

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Melanogenesis
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Melanotransferrin
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Transport kinetics; Periplasmic binding protein; Transport mechanism; Asymmetric carrier; Bacterial transport; Transport model (Krupka, R.M. (1110) 11)

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VDAC modulator; Channel; Mitochondrion; Respiration control; Membrane permeability (Liu, M.Y. (1098) 255)

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1-Methyladenosine
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Methylmalonate semialdehyde dehydrogenase
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Mevalonate
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MG-63
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Micelle
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pH, intracellular; pH regulation; Fluorescent probe; Carboxyfluorescein; (*L. lactis*) (Molenaar, D. (1115) 75)

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Multigene family; 3′ Untranslated region; pEXI/172; P-glycoprotein-like gene sequence (Deuchars, K.L. (1130) 157)

P-glycoprotein; Cell line (Nielsen, D. (1139) 169)

Multienzyme complex
Lysosomal glycosidase; G_{M1}-galactosidase; Neuraminidase; Supramolecular enzyme organization; Micellar enzymology (Pshezhetsky, A.V. (1122) 154)

Multifrequency
EPR; $g = 4$ signal; Oxygen-evolving complex; Spin state; S_2-state (Haddy, A. (1099) 25)

Multigene family
Multidrug resistance; 3′ Untranslated region; pEXI/172; P-glycoprotein-like gene sequence (Deuchars, K.L. (1130) 157)

Multilamellar liposome
Alpha-toxin; α-Toxin; Membrane channel; Fatty acyl domain; Phospholipid; (*S. aureus*) (Tomita, T. (1104) 325)

Multiple-indicator dilution technique
Palmitate; Membrane transport; Fatty acid metabolism; Unidirectional flux; (Rat liver) (Ferraresi-Filho, O. (1103) 239)

Multiplicity
Deoxyribonuclease; Urine; Purification; Isoelectric focusing (Yasuda, T. (1119) 185)

Ribonuclease; Antipeptide antibody; Immunoblotting; (Human urine) (Yasuda, T. (1121) 331)

Multipoint binding
Avidin; Biotinylated membrane; Biotin-binding site; Erythrocyte membrane; Hemolysis; Complement (Muzykantov, V.R. (1107) 119)

Mural thrombogenesis
Platelet; Collagen; Antiplatelet agent; Carbamoylpiperidine (Alevriadou, B.R. (1137) 279)

Murine immune cell
Ganglioside; G_{M1b}; Monosialoganglioside; Sialidase sensitivity; Myelomonocytic cell line (Yohe, H.C. (1109) 210)

Murine small heat-shock protein hsp25
Phosphorylation; Protein kinase; Ehrlich ascites tumor (Benndorf, R. (1136) 203)

Muscarinic stimulation
Cytosolic Ca^{2+} concentration; Amylase release; Rat parotid acinar cell (Tojyo, Y. (1134) 278)

Muscle
Amino acid transport; Myotube; Cell culture; System L; Leucine (Yeh, J.-y. (1108) 1)

Skeletal muscle; Glycogen phosphorylase; Gelatin affinity; Immunolocalization (Law, D.J. (1122) 225)

Fibronectin; Integrin; Fibronectin alternative splicing; Cell differentiation; Myogenesis; mRNA; Polymerase chain reaction (Steffensen, B. (1137) 95)

Muscle dystrophin
Skeletal muscle; Protein degradation; Protein structure; (Chicken gizzard) (Augier, N. (1138) 297)

Muscle function
ADP; Phosphocreatine; Skinned smooth muscle; (Guinea pig) (Clark, J.F. (1100) 137)

Mushroom peroxidase
Peroxidase; NMR; Nuclear Overhauser effect study; Hemoprotein; (*C. macrorhizus*) (Dugad, L.B. (1122) 63)

Mutagenesis
Carbonic anhydrase; Proton transfer; Enzyme kinetics; (Human) (Engstrand, C. (1122) 321)

Mutant
Quinone; Nitrate reductase; Anaerobic growth; Aerobic growth (Pommier, J. (1107) 305)

Sterol; Trafficking; Yeast (Keesler, G.A. (1123) 127)

Mutation
β-Alanine transaminase; (*D. melanogaster*) (Weber, J.P. (1115) 181)

Lipoprotein lipase; Amino acid sequence; cDNA sequence; Hyperlipoproteinemia; Kinetics (Wang, C.-S. (1123) 1)

PCR; β-Globin gene; Hemoglobin Hamilton; CpG dinucleotide (Manca, L. (1139) 17)

Thyroxine-binding globulin; TBG-San Diego; Sequencing; Variant; Deficiency; Polymorphism; (Thyroid) (Bertenshaw, R. (1139) 307)

Myasthenia gravis
Antibody; Anti-idiotypic antibody; Toxin; Curaremimetic toxin (Pillet, L. (1138) 282)

c-*myc*
Heat shock protein 70; Band shift; Nucleic acid–protein interaction; (Human) (Taira, T. (1130) 166)

Magnetic field; Transcription; 60 Hz; T-lymphoblastoid cell; c-*fos*; c-*jun*; Protein kinase C (Phillips, J.L. (1132) 140)

N-*myc* enhancer
CAT assay; S1 mapping; (Mouse) (Imamura, Y. (1132) 177)

Mycosubtilin
β-Hydroxy fatty acid; Surfactin; β-Amino fatty acid; Iturin; Bacillomycin; (*B. subtilis*) (Besson, F. (1123) 51)

Myelin
Fluorescence anisotropy; DPH; Membrane fluidity; Pressure adaptation; Homeoviscous adaptation (Behan, M.K. (1103) 317)

Peripheral nerve; Spinal cord; Phospholipid; Cerebroside; Fatty acid (Svennerholm, L. (1128) 1)

Myelin basic protein
Ganglioside; Sulfatide; Glycosphingolipid; Membrane fusion; Melittin (Maggio, B. (1112) 105)

TATA-box; Core promoter; Transcription factor; (Mouse) (Tamura, T.-a. (1129) 83)

Myelin basic protein kinase
EGF receptor; MAP kinase; $p34^{cdc2}$/cyclin A; (A431 cell) (Sanghera, J.S. (1135) 335)

Myelin figure
Phosphatidylcholine; Helix formation; Intermembrane binding; Bending elasticity (Mishima, K. (1108) 115)

Myelomonocytic cell line
Ganglioside; G_{M1b}; Monosialoganglioside; Sialidase sensitivity; Murine immune cell (Yohe, H.C. (1109) 210)

Myoadenylate deaminase deficiency
Adenylate deaminase; Maturation; (Cultured human muscle cell) (Jacobs, A.E.M. (1139) 91)

Myoblast
RNA processing; Histone; Differentiation (Larson, D.E. (1131) 139)

Myoblast differentiation
Cytochrome *c* oxidase; Transcription; Mitochondrial myopathy; (Human) (Taanman, J.-W. (1139) 155)

Myocard
Creatine kinase; Mitochondrion; Ischemia; Reperfusion; Oxidative phosphorylation (Soboll, S. (1100) 27)

Myocardium
Phospholipase D; Transphosphatidylation; Phosphatidic acid; Reperfusion injury; (Rat) (Moraru, I.I. (1139) 148)

Myocyte
Skeletal muscle; Cell line; Dihydropyridine receptor; α-Bungarotoxin receptor; Ion channel (Caviedes, R. (1134) 247)

Myoepithelial cell
Proteoglycan; Structural analysis; Immunofluorescence; Immunolocalization; (mammary gland) (Warburton, M.J. (1117) 291)

Myogenesis
Fibronectin; Integrin; Fibronectin alternative splicing; Cell differentiation; Muscle; mRNA; Polymerase chain reaction (Steffensen, B. (1137) 95)

Myoglobin
Electron transfer; Trimethylphosphine (Brunel, C. (1101) 73)

Hemocyanin; Hemerythrin; Redox reaction; Electron transfer (Zhang, B.-J. (1102) 245)

NMR; 1,4,5,8-Tetramethylhemin; Heme rotation; Globin fluctuation (Neya, S. (1117) 243)

Heme propionate; Autoxidation; (*Aplysia*) (Matsuoka, A. (1118) 123)

NMR; Hyperfine shift; Nuclear Overhauser effect; Heme vinyl group (Yamamoto, Y. (1120) 173)

Crystallographic analysis; Ligand assessment; Binding kinetics; (Sperm whale myoglobin) (Sato, T. (1121) 1)

Dynamics; Kinetics; Oxygen escape reaction; Transition (Sato, F. (1122) 299)

Myohemerythrin
Amino acid sequence; Sipunculid; (*P. gouldii*) (Long, R.C. (1122) 136)

Myo-inositol
Phosphatidylinositol; Inositol trisphosphate; Bradykinin; Vasopressin; Mesangial cell; (Kidney) (Greenberg, L. (1138) 229)

Myopathy
Creatine kinase; Mitochondrion; Metabolite channelling; Energy metabolism; Pathology (Wyss, M. (1102) 119)

Myosin
Diphosphorylation; Platelet; (Human) (Itoh, K. (1133) 286)

Diphosphorylation; (Human platelet) (Itoh, K. (1136) 52)

Myosin heavy-chain isoform
Brain myosin; Monoclonal antibody (Kimura, A. (1118) 59)

Myosin light chain
Smooth muscle; Nonmuscle myosin (Inoue, A. (1130) 197)

Protein phosphorylation; Phorbol ester; (Aortic smooth muscle) (Bárány, K. (1134) 233)

Myotube
Amino acid transport; Muscle; Cell culture; System L; Leucine (Yeh, J.-y. (1108) 1)

Calsequestrin; Casein kinase II; Development; Sarcoplasmic reticulum; (Muscle) (Cala, S.E. (1118) 277)

N

NAD^+
Radioenzymatic assay; Solubilized enzyme; Betaine aldehyde; Betaine (Zhang, J. (1117) 333)

NAD(H)
Transhydrogenase; Binding site; NADP(H); Photoaffinity labeling; Mitochondrion; Proton pump (Hu, P.-S. (1102) 19)

NADH
Cell-free transfer; Golgi apparatus; Plasma membrane; Ascorbic acid; (Rat liver) (Rodriguez, M. (1107) 131)

NADH oxidase
Plasma membrane; Electron transport; Adriamycin-transferrin conjugate; Transferrin-adriamycin conjugate; Antitumor drug; (HeLa cell) (Sun, I.L. (1105) 84)

Growth factor; Hormone; Growth; Plasma membrane; (Rat liver) (Brightman, A.O. (1105) 109)

Keratinocyte; Cell growth; Cell immortalization; (Human) (Morré, D.J. (1134) 217)

NADH:quinone reductase
Respiratory chain; Sodium pump; Two-electron reduction; One-electron reduction; (*V. alginolyticus*) (Hayashi, M. (1099) 145)

Enzyme induction; DT-diaphorase; Quinone; Michael acceptor; (*E. coli*) (Unemoto, T. (1099) 170)

NADH : quinone reductase, Na^+
Sodium respiratory chain; Alkaline adaptation; Oxidase, Na^+; (*Bacillus FTU, E. coli*) (Avetisyan, A.V. (1098) 95)

NADH : ubiquinone oxidoreductase
Respiratory chain; Calcium ion; Presteady-state kinetics; (Bovine heart mitochondria) (Kotlyar, A.B. (1098) 144)

Complex I; Assembly; Chaperone; *(N. crassa)*; *(E. coli)*; *(A. niger)* (Weidner, U. (1101) 177)

NADH : ubiquinone reductase
Acridone; Complex I; QSAR; (Bovine heart); (Mitochondria) (Oettmeier, W. (1099) 262)

$NADP^+$
Photosystem I; Iron-sulfur center; Photosynthesis; Reaction center (Hanley, J.A. (1099) 152)

Glucose-6-phosphate dehydrogenase; Unfolding; Guanidine hydrochloride; Thermal denaturation; Trypsin (Bautista, J.M. (1122) 99)

NADP(H)
Transhydrogenase; Binding site; NAD(H); Photoaffinity labeling; Mitochondrion; Proton pump (Hu, P.-S. (1102) 19)

NAD(P)H
Nucleus; Oxygen radical production; Phenobarbital; 3-Methylcholanthrene (Puntarulo, S. (1116) 17)

NADPH-cytochrome *c* (*P*-450) reductase
Vitamin B-12; Cobalamin; Aquacobalamin reductase; (Rat liver microsome) (Watanabe, F. (1119) 175)

NADPH oxidase
Neutrophil; FAD; FMN; Flavoprotein; Luciferase chemiluminescence (Yoshida, L.S. (1135) 245)

Granulocyte; Neutrophil; Cytochrome *b*-558; EPR; (Pig) (Fujii, H. (1136) 239)

Oxygen radical; Granule; Neutrophil; Calcium ionophore; (Human) (Dahlgren, C. (1137) 182)

NADP / NADPH
zeta-Crystallin; Hexose monophosphate shunt; Lens; Quinone oxidoreductase (Rao, P. (1116) 75)

Na-H exchange
Cytosolic pH; Rabbit collecting tubule; H secretion; Isoproterenol (Dagher, G. (1133) 17)

$Na^+/K^+/2Cl^-$ cotransporter
Thick ascending limb of Henle's loop; Rabbit kidney; Ammonium transport; Intracellular pH; NMR, ^{31}P- (Von Recklinghausen, I.R. (1136) 129)

Naproxen
Prostaglandin H synthase; Gene expression; Nonsteroidal anti-inflammatory drug; Endothelial cell (Zyglewska, T. (1131) 78)

Natural killer cell
Subtractive hybridization; cDNA cloning; T cell; Golgi apparatus (Liu, L. (1132) 75)

NBD-glucosamine
Cell volume; Light scattering; Epstein-Barr virus (Rauchman, M.I. (1111) 231)

NBL-1
Epithelial cell; Amino acid transport; (Bovine kidney) (Doyle, F.A. (1104) 55)

NDH-1
Complex I; (*Paracoccus denitrificans*) (Yagi, T. (1101) 181)

ND1 / 3460 mutation
Leber disease; Mitochondrion; ND4/11778 mutation (Savontaus, M.-L. (1101) 204)

ND4 / 11778 mutation
Leber disease; Mitochondrion; ND1/3460 mutation (Savontaus, M.-L. (1101) 204)

Near-infrared vibronic sideband spectroscopy
Calcium binding protein; Vibrational spectroscopy; Ytterbium; Parvalbumin; Tryptophan fluorescence (Mattioli, T.A. (1101) 121)

Necrosis
Apoptosis; Programmed cell death; Flow cytometric analysis; Heterogeneity (Dive, C. (1133) 275)

Negative growth factor
β-Galactoside binding protein; Cytokine; Glycan association; Oligomeric state (Wells, V. (1121) 239)

Neolacto-series carbohydrate chain (type 2)
Tumor associated carbohydrate antigen; Glycosphingolipid; Pancreatic cancer; Blood group antigen (Hattori, H. (1125) 21)

Neomycin
Codon–anticodon interaction; Ribosomal subunit, 30S; Poly(U); Poly(dT) (Soldatkin, K.O. (1130) 38)

Neonatal jaundice
Heme oxygenase isozyme; Synthetic metalloporphyrin; Bile pigment formation; Microsomal electron transport system (Maines, M.D. (1131) 166)

Neonatal piglet
Palmitic acid; Essential fatty acid; (Pig brain); (Pig liver) (Arbuckle, L.D. (1125) 262)

Neonatal respiratory distress syndrome
Surfactant associated protein C; Alternative splicing; Pulmonary surfactant; Lung; Phospholipid (Connelly, I. (1127) 199)

Neopterin
Interleukin 2 receptor; Tetrahydrobiopterin; Pterin; Molecular modelling; Conformational analysis (Ziegler, I. (1135) 330)

Nerve growth factor
Epidermal growth factor; Tyrosine kinase; Neurite outgrowth; (Rat pheochromocytoma PC12 cell) (Muroya, K. (1135) 353)

Nerve terminal
Synaptosome; Calcium channel; Amino acid transmitter (Nicholls, D. (1101) 264)

Neural cell
Ethanol; Gene expression; Two-dimensional gel electrophoresis (Miles, M.F. (1138) 268)

Neural cell adhesion molecule (NCAM)
Kidney; DNA sequence; (Human muscle) (Rossell, R.J. (1130) 95)

Neuraminidase
Kurloff cell; Glycoprotein; Lectin; Affinoblotting; Glycosidase; Sialidase; Acid phosphatase (Landemore, G. (1116) 112)

Lysosomal glycosidase; G_{M1}-galactosidase; Multienzyme complex; Supramolecular enzyme organization; Micellar enzymology (Pshezhetsky, A.V. (1122) 154)

Neurite outgrowth
Nerve growth factor; Epidermal growth factor; Tyrosine kinase; (Rat pheochromocytoma PC12 cell) (Muroya, K. (1135) 353)

Neuroblastoma cell line NB-OK-1
Atrial natriuretic peptide (ANP) receptor; ATP; Binding inhibition; (Human) (Delporte, C. (1135) 323)

Neuromelanin
Melanin; Substantia nigra; Parkinson disease; (Human brain) (Zecca, L. (1138) 6)

Neuron
Corticotropin; Phorbol ester; Glycolysis; 6-Phosphofructo-1-kinase; Fructose 2,6-bisphosphate (Anglard, P. (1133) 321)

Neuropeptide
Chromaffin granule; Chromogranin B; Peptide analysis; Peptide sequence; (Bovine) (Dillen, L. (1120) 105)

Neutral metalloproteinase
Cytokine; Interleukin-1; Chondrocyte activating factor; Synoviocyte; Receptor antagonist (Bandara, G. (1134) 309)

Neutrophil
Cytosolic; Phospholipase C; Phosphoinositide (Faber, A. (1128) 8)

Leukotriene; Arachidonate metabolism; (Human platelet) (Antoine, C. (1128) 139)

Immobilized-phosphoprotein; Phosphatase (Ding, J. (1133) 235)

NADPH-oxidase; FAD; FMN; Flavoprotein; Luciferase chemiluminescence (Yoshida, L.S. (1135) 245)

Staurosporine; Inositol 1,4,5-trisphosphate; Diacylglycerol; Intracellular calcium; (Human) (Nigam, S. (1135) 301)

Granulocyte; Cytochrome *b*-558; EPR; NADPH oxidase; (Pig) (Fujii, H. (1136) 239)

Oxygen radical; Granule; Calcium ionophore; NADPH oxidase; (Human) (Dahlgren, C. (1137) 182)

NG108-15 cell
Agonist binding; Oscillation; Opiate receptor; Periodic phenomenon (Sukhomlin, T.K. (1135) 226)

NGF
Poly(ADPR)polymerase; Expression; Proliferation; Differentiation; bFGF; (Rat astrocyte); (Rat neuron) (Chabert, M.G. (1136) 196)

Nickel
Hydrogenase; Iron-sulfur; Redox potential; (*M. thermoautotrophicum*); (*C. vinosum*) (Coremans, J.M.C.C. (1119) 148)

Hydrogenase; Iron-sulfur cluster; Redox potential; (*C. vinosum*) (Coremans, J.M.C.C. (1119) 157)

Nicotinamide nucleotide
Transhydrogenase; Photosynthetic bacterium; Chromatophore; Protonmotive force; Energy coupling; (*Rb. capsulatus*) (Palmer, T. (1098) 21)

Nicotinamide nucleotide transhydrogenase
Chromatophore; Enzyme activation; (*R. capsulatus*) (Palmer, T. (1099) 157)

***S*-(−)-Nicotine**
Cytochrome P450IIB4; Liposome; Membrane partition; *N*,*N*-Diethylaniline; Fluorescence quenching (Vermeir, M. (1107) 93)

Nicotinic acetylcholine receptor
Fourier transform; Ion flux response; Protein–lipid interaction; Cholesterol; Affinity-state transition; (*T. californica*) (Sunshine, C. (1108) 240)

Niemann-Pick disease
Cholesterol esterification; Cholesterol mass; 25-Hydroxycholesterol; Acyl-CoA : cholesterol acyltransferase; Human fibroblast (Sidhu, H.S. (1124) 29)

Acyl-CoA : cholesterol acyltransferase; Sphingomyelinase; Human fibroblast (Byers, D.M. (1138) 20)

Ni, FeS cluster
DNA sequencing; Hydrogen oxidation; Redox; Electron carrier; Protein assembly; *hox* (Chen, J.C. (1131) 122)

DNA sequencing; Hydrogenase; Protein assembly; Electron carrier; (*A. vinelandii*) (Chen, J.C. (1131) 199)

Nigericin
Thylakoid membrane; Ionic current; Patch-clamp; Proton transport; (*P. metallica*) (Bulychev, A.A. (1099) 16)

Nitrate reductase
Quinone; Anaerobic growth; Mutant; Aerobic growth (Pommier, J. (1107) 305)

Protein phosphorylation; (Spinach leaf) (MacKintosh, C. (1137) 121)

Nitric oxide
L-Arginine; EPR; Lipopolysaccharide; L-[*Guanidineimino*-$^{15}N_2$]arginine (Kubrina, L.N. (1099) 233)

Iron-sulfur center; Free iron; Dinitrosyl iron complex; Macrophage (Vanin, A.F. (1135) 275)

Nitrile hydratase gene
Cloning; Cobalt; (*Rhodococcus*); (*E. coli*) (Kobayashi, M. (1129) 23)

Nitrobenzylthioinosine
Chromaffin cell; Cycloheximide; Down regulation; Nucleoside transport; Protein recycling; Protein turnover (Torres, M. (1105) 291)

Nucleoside transport; Hydrostatic pressure; Erythrocyte; Membrane transport (Hall, A.C. (1105) 300)

Nucleoside transport; Facilitated transport; Active transport; LLC-PK_1 epithelium; (Pig kidney brush-border vesicle) (Griffith, D.A. (1106) 303)

Nucleoside transport; (Pig epithelial cell line (PK-15)) (Aran, J.M. (1108) 67)

Nucleoside transport; (Pig epithelial cell line (PK-15)) (Aran, J.M. (1110) 51)

Nitrobenzylthioinosine binding
Nucleoside transport; Reticulocyte maturation (Liang, L. (1106) 189)

Nitrogenase regulation mutant
ADP-ribosylation; Manganese deficiency (Hallenbeck, P.C. (1118) 161)

Nitrogen storage
Energy transfer; Phycoerythrin; Biliprotein; Photosynthesis; Light harvesting; (Cyanobacterium) (Heathcote, P. (1099) 267)

***p*-Nitrophenyl acetate**
Methylmalonate semialdehyde dehydrogenase; Methylmalonate semialdehyde; Malonate semialdehyde; Esterase; Aldehyde dehydrogenase; Acetyl-CoA (Popov, K.M. (1119) 69)

5-Nitro-2-(-3-phenylpropylamino)benzoic acid
Chloride channel; Choride transport; Intestinal secretion; Nonspecific effect (Keeling, D.J. (1115) 42)

Nitrosylated HDL_3
HDL_3; Bovine HDL; Lipoprotein; Trypanolysis; (*T. b. brucei*) (Gillett, M.P.T. (1123) 239)

Nitroxide
Oxygen; Intracellular concentration; Extracellular concentration; Simultaneous determination; EPR (Hu, H. (1112) 161)

LDL; Spin trap; EPR (Kalyanaraman, B. (1126) 309)

Nitroxide free radical
Free radical; Hydrogen peroxide; Cellular hydrogen peroxide; (Human tumor cell) (Voest, E.E. (1136) 113)

N-linked carbohydrate
5′-Nucleotidase; Limited proteolysis; Protein domain organization; Affinity labeling (Stochaj, U. (1122) 327)

NMR
Cytochrome *c′*; Electron transfer; EPR; (*Rb. capsulatus*) (Monkara, F. (1100) 184)

Gramicidin A; Monte Carlo simulation; Bilayer (Xing, J. (1106) 227)

Cyclic glucan; Phosphocholine; (*B. japonicum*) (Rolin, D.B. (1116) 155)

Cyclic glucan; Phosphocholine; (*B. japonicum*) (Rolin, D.B. (1116) 215)

HPLC; Mass spectrometry, FAB; Quinone; Pyrroloquinoline quinone (Buffoni, F. (1116) 297)

Water diffusion; Oil diffusion; Sorption-desorption experiments; Rape seed (*Brassica napus* L.) (Fleischer, G. (1116) 305)

1,4,5,8-Tetramethylhemin; Myoglobin; Heme rotation; Globin fluctuation (Neya, S. (1117) 243)

Phenoxazione synthesis; Infrared spectrometry; Absorption spectrometry; Hemoglobin (Tomoda, A. (1117) 306)

Subtilisin Carlsberg; Proteinase; Autolysis; Selective excitation; Spin echo (Consonni, R. (1119) 39)

Water content; Solid protein; Deuterium (Tamura, A. (1119) 178)

Hyperfine shift; Nuclear Overhauser effect; Myoglobin; Heme vinyl group (Yamamoto, Y. (1120) 173)

Epidermal growth factor; Site-directed mutagenesis; Human epidermal growth factor receptor; Protein engineering (Koide, H. (1120) 257)

Hydrogen exchange; Cytochrome; (*Pseudomonas*) (Timkovich, R. (1121) 8)

Peroxidase; Mushroom peroxidase; Nuclear Overhauser effect study; Hemoprotein; (*C. macrorhizus*) (Dugad, L.B. (1122) 63)

Lanthanide; Metal binding site (Bondon, A. (1135) 19)

NMR, ^{13}C-
Glycolysis; TCA cycle; Doxorubicin; (Heart failure) (Chatham, J.C. (1138) 1)

Lipid metabolism; Choline; Ethanolamine; NMR, ^{31}P-; T47D; Spheroid; Proliferating; Quiescent (Ronen, S.M. (1138) 203)

NMR, ^{35}Cl-
Anion binding; Magnesium ion; Phosphate; Pyridoxalphosphate-6-azophenyl-2′-sulfonic acid; Adenylyl imidodiphosphate; Sarcoplasmic reticulum (Janetzky, S.T. (1105) 278)

NMR, ^{1}H-
Substance P; Phosphatidylserine; Lipid bilayer (Duplaa, H. (1107) 12)

Liposome; Archaebacterium; Halophile; Permeability; FABMS (Yamauchi, K. (1110) 171)

N-Acetylglucosaminyltransferase; Oligosaccharide; Milk; (Marsupial) (Urashima, T. (1117) 223)

Peroxidase; Heme; Active site (Dugad, L.B. (1118) 36)

TnC; TnI; Mastoparan; Calcium ion binding; (Wasp venom) (Tsuda, S. (1121) 213)

Creatine; Creatine kinase; NMR, ^{31}P- (Unitt, J.F. (1133) 115)

Polycystic kidney disease; Cyst fluid (Foxall, P.J.D. (1138) 305)

NMR, ^{1}H-, ^{13}C-
Glucose metabolism; Amphotericin B; (*S. cerevisiae*) (Wietzerbin, J. (1136) 105)

NMR, ^{2}H-
(−)-Δ^8-Tetrahydrocannabinol; (−)-*O*-Methyl-Δ^8-tetrahydrocannabinol; Dipalmitoylphosphatidylcholine; Drug–membrane interaction; DSC; X-ray diffraction; Solid state NMR (Yang, D.-P. (1103) 25)

Phospholipid membrane; Cholesterol; NMR, ^{31}P- (Habiger, R.G.K. (1103) 69)

Oligosaccharide conformation; Glycosphingolipid; GM_1 (Jarrell, H. (1103) 331)

Molecular evolution; Lipid membrane; Tricyclohexaprenol; Octaprenediol; Isoarborinol (Krajewski-Bertrand, M.-A. (1105) 213)

Lipid organization; Membrane fluidity; Temperature effect; 2-Phenylethanol; NMR, ^{31}P-; (*E. coli*) (Killian, J.A. (1105) 253)

Glycolipid; Bilayer; Phase diagram (Morrow, M.R. (1106) 85)

Bacteriorhodopsin; Dimyristoylphosphatidylcholine; Phosphocholine headgroup; NMR, ^{31}P- (Gale, P. (1106) 317)

Glycosphingolipid; Unsaturated fatty acid; Lipid bilayer (Singh, D. (1107) 23)

M13 coat protein; Lipid morphology; Proton–lipid interaction (Sanders, J.C. (1110) 218)

δ-Toxin; Phosphatidylcholine; NMR, ^{31}P-; Protein–lipid interaction (Rydall, J.R. (1111) 211)

Phosphatidylinositol; Model membrane (Hansbro, P.M. (1112) 187)

NMR, ^{23}Na-
Potassium ion; Atomic absorption, K^+; Bacterial membrane; Ion transport; Monensin; Ionic selectivity; (*S. faecalis*); (*E. hirae*) (Rabaste, F. (1108) 177)

NMR, one-dimensional
Bacterial glycolipid; Hexosyl acylglycerol; Structural elucidation; Glycolipid; NMR, two-dimensional; (*C. fuscus*) (Scherer, O.W. (1117) 42)

NMR, ^{31}P-
Inflorescence; Respiration; Plant thermogenesis; (Voodoo lily) (Skubatz, H. (1100) 98)

Phospholipid membrane; Cholesterol; NMR, ^{2}H- (Habiger, R.G.K. (1103) 69)

Phosphatidylcholine; Nuclear Overhauser effect (Tauskela, J.S. (1104) 137)

Lipid organization; Membrane fluidity; Temperature effect; 2-Phenylethanol; NMR, ^{2}H-; (*E. coli*) (Killian, J.A. (1105) 253)

Bacteriorhodopsin; Dimyristoylphosphatidylcholine; Phosphocholine headgroup; NMR, ^{2}H- (Gale, P. (1106) 317)

Two-dimensional exchange NMR; One-dimensional exchange NMR; Lamellar phase; Hexagonal phase; Cubic phase; Phospholipid phase transition (Fenske, D.B. (1108) 201)

Poly(ethylene glycol); Monomethoxypoly(ethylene glycol); Liposome; Magnetic resonance imaging; Paramagnetic; Gadolinium; Contrast agent (Tilcock, C. (1110) 193)

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Non-equilibrium thermodynamic system
Energy conversion; Non-equilibrium kinetic system; Biothermokinetics (Walz, D. (1101) 257)

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Nucleobase transport
Nucleobase; Purine; Pyrimidine; Adenine; (*G. intestinalis*) (Ey, P.L. (1109) 179)

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Pantetheine
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Phagocytosis
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Phlorizin
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Diacetylene; Lipid bilayer; Permeability; Ether lipid; Bilayer structure; X-ray diffraction (Rhodes, D.G. (1128) 93)

Polymorphism
Cytochrome *c* oxidase; Enzyme isoform; Subunit IV (Van Kuilenburg, A.B.P. (1119) 218)

Thyroxine-binding globulin; TBG-San Diego; Sequencing; Variant; Mutation; Deficiency; (Thyroid) (Bertenshaw, R. (1139) 307)

Polymorphonuclear leukocyte
Platelet-activating factor; Albumin; Fatty acid; (Human) (Wheelan, P. (1127) 284)

Platelet; Calcium ionophore A23187; Icosanoid; 12-HETE (McCulloch, R.K. (1133) 142)

Polynucleosome Poly(ADP-ribose)
Chromatin; Histone antibody; Synthetic peptide; ELISA (Thibeault, L. (1121) 317)

Polynucleotide
Base pairs opening kinetics; Hydrogen exchange; Stopped-flow measurement (Girardet, J.-L. (1130) 127)

Polyoma transformant
Ganglioside; SV40 transformant; Cultured cell; (Rat embryo fibroblast) (Bai, H. (1136) 23)

Polypeptide D1
Tyrosine; Redox activity; Manganese ion oxidation; Photosystem II (Diner, B.A. (1101) 134)

Polypeptide degradation
Photosystem II; Electron transport; Reaction center; Light-induced inhibition (Virgin, I. (1101) 139)

Polyphosphoinositide
Inositol phospholipid; Phosphoinositide; Phospholipase C; Plasma membrane; Signal transduction; (Wheat) (Melin, P.-M. (1123) 163)

Polysaccharide
Biosensor; Glucose oxidase; Ferrocene; Detergent (Fraser, D.M. (1099) 91)

Polysome
Ferritin; Endoplasmic reticulum; Translocation; (Rat liver) (Tacchini, L. (1131) 133)

Pancreas; Translation; Cholecystokinin (Perkins, P.S. (1136) 265)

Polysulfonate compound
Suramin; Peroxisome: Import; Acyl-CoA oxidase; (Rat liver) (Imanaka, T. (1134) 197)

Polytene chromosome
DNA topology (Gruzdev, A.D. (1131) 35)

Poly(U)
Codon–anticodon interaction; Ribosomal subunit, 30S; Poly(dT); Neomycin (Soldatkin, K.O. (1130) 38)

Polyubiquitin gene
Sequence homology; Evolutionary conservation; (Chinese hamster) (Nenoi, M. (1130) 247)

Polyunsaturated fatty acid
α-Tocopherol; Fatty acid; Ethanol; Phospholipid bilayer; Membrane (Stillwell, W. (1105) 237)

Acyl condensation; Acyl chain elongation; Acyl-CoA; Development; Malonyl-CoA; (Rat brain microsome) (Yoshida, S. (1123) 316)

Nutrition; Fatty acid profile; (Rat brain) (Alsted, A.-L. (1125) 237)

Plasma; Lipoprotein cholesterol; (Rat) (Masumura, S. (1125) 292)

Dietary fat; Plasma lipid; (Rat) (Gibson, R.A. (1126) 49)

Glioma; Plasmalogen; Fatty acid, $(n-3)$ and $(n-6)$; Phospholipid; Subcellular fraction; Plasma membrane; Microsome; Percoll extraction (Thomas, S.E. (1126) 125)

Monocyte (U937 cell); PAF; Leukotriene D_4 (Weber, C. (1133) 38)

$(n-3)$ Polyunsaturated fatty acid
Carnitine palmitoyl transferase; Triacylglycerol; Phosphatidate phosphohydrolase; Peroxisome (Surette, M.E. (1126) 199)

Icosapentaenoic acid ethyl ester; Intravenous infusion; Fatty acid composition; Plasma lipid; Emulsion; (Rat liver); (Rat heart) (Yamazaki, K. (1128) 35)

Polyunsaturated monoacylglycerol
Lipoprotein; (Rat) (Mortimer, B.-C. (1127) 67)

Polyunsaturated / saturated fatty acid ratio
Insulin binding; Nucleus; (Liver) (Cheema, S.K. (1117) 37)

Pool size
Phospholipid transport; Ethanolamine; Phosphatidylethanolamine; (Hamster heart) (McMaster, C.R. (1124) 13)

Porcine pancreatic phospholipase A_2
Phospholipase A_2; Activation mechanism; Large unilamellar vesicle; Reversibility; (Snake venom) (Bell, J.D. (1127) 208)

Pore formation
α-Toxin monomer; Calcium ion; Liposome; (*S. aureus*) (Tokunaga, H. (1105) 125)

Erythrocyte membrane; Tellurite; Leak; Deformability (Deuticke, B. (1109) 97)

Pore size
α-Latrotoxin; Channel; Cluster structure (Krasilnikov, O.V. (1112) 124)

Pore theory
Proteinuria; Glomerular basement membrane; Ultrafiltration; Cross-linking; Fibre-matrix hypothesis; Glomerulonephritis; Dimethylmalonimidate; Glutaraldehyde (Walton, H.A. (1138) 173)

Porin
Ion channel; Mitochondrial outer membrane; Lipid bilayer; Mitochondrion; Voltage dependence; (*P. sativum*) (Schmid, A. (1112) 174)

Porphyrin
XANES spectroscopy; Heme structure (Cartier, C. (1119) 169)

Retina; Pigment epithelium; Melatonin; Light adaptation (Durkó, I. (1135) 111)

Tubulin; Microtubule; Photochemical inhibition; Photochemotherapy (Berg, K. (1135) 147)

Positional specificity
Lecithin:cholesterol acyltransferase; Arachidonic acid; Cholesteryl ester; Phosphatidylcholine (Subbaiah, P.V. (1128) 83)

Position effect
DNA methylation; Gene transfection; α-Fetoprotein; CpG dinucleotide (Hasse, A. (1131) 16)

Posttranscriptional control
atp operon; mRNA structure; mRNA stability; Endoribonuclease; Exoribonuclease; Transcriptional terminator; (*E. coli*) (Ziemke, P. (1130) 297)

Posttranslational processing
Lysosomal enzyme; Arylsulfatase; Protein sequence (Fujii, T. (1122) 93)

Posttranslational regulation
Stress; Spermidine/spermine N^1-acetyltransferase; Ornithine decarboxylase; SAT mRNA; (Ehrlich ascites tumor cell) (Obayashi, M. (1131) 41)

Potassium
ATPase, Na^+/K^+-; Phosphoenzyme; Magnesium; Dimethylsulfoxide (Fontes, C.F.L. (1104) 215)

Somatotropin; Somatotropin releasing hormone; Morphology; Perfusion; (Anterior pituitary gland); (Rat) (Engström, K.G. (1135) 318)

Potassium channel, calcium ion activated
Endothelial cell; Calcium ion, intracellular; EDRF/NO; (Pig aorta) (Groschner, K. (1137) 162)

Potassium iodide
Lipid hapten; Dansyl; Fluorescence quenching; Liposome (Kimura, K. (1104) 9)

Potassium ion
Chloride; Transient; Electrical transient; (Toad bladder) (Gordon, L.G.M. (1108) 8)

Cell size; Vacuole; Photodynamic treatment; Toluidine blue; Yeast; (*K. marxianus*) (Paardekooper, M. (1108) 86)

NMR, ^{23}Na-; Atomic absorption, K^+; Bacterial membrane; Ion transport; Monensin; Ionic selectivity; (*S. faecalis*); (*E. hirae*) (Rabaste, F. (1108) 177)

Potassium ion channel
EGF; Calcium ion activated; Calcium ion activation; ATPase, Na^+/K^+-; (Mouse fibroblast); (Human receptor) (Lovisolo, D. (1104) 73)

Epithelium; Basolateral membrane; Volume regulation; Ion conductance (Backman, K. (1105) 89)

Erythrocyte; Sickle cell; Deformation; Ektacytometer; Calcium ion-activated potassium ion channel; Gardos channel; Charybdotoxin (Johnson, R.M. (1107) 314)

Skeletal muscle; ATP binding; Calcium ion dependence; (Frog) (Krippeit-Drews, P. (1108) 119)

Attached cell; Hyposmosis; Regulatory volume change; Cell water (Ikehara, T. (1111) 151)

Calcium ion-activated potassium ion channel; Single-channel patch clamp; Patch clamp; Calcium ion dependence; Voltage dependence; Erythrocyte; (Human) (Leinders, T. (1112) 67)

Calcium ion-activated potassium ion channel; Calcium; Cadmium; Lead; Magnesium; Patch clamp; Heavy metal; Erythrocyte; (Human) (Leinders, T. (1112) 75)

Potassium ion conductance
A6 cell; Hyposmotic challenge; Basolateral potassium ion conductance; Microelectrode (Granitzer, M. (1110) 239)

Potassium ion current
Macrophage; Complement component; Single-channel recording; C5a (Ichinose, M. (1111) 165)

Potassium ion, cytoplasmic
ATPase, Na^+/K^+-; Cytoplasmic sodium activation; Cytoplasmic potassium inhibition; Allosteric effect; Sodium ion–sodium ion exchange (Cornelius, F. (1108) 190)

Potassium ion efflux
Cell volume; Renal medulla; (Rat) (Law, R.O. (1107) 186)

Potassium ion occlusion
ATPase, Na^+/K^+-; Rubidium ion occlusion; Occlusion; (Shark rectal gland) (Esmann, M. (1108) 247)

Potassium ion–potassium ion exchange
Sodium/potassium pump; Phosphatase, potassium dependent; ATPase, Na^+/K^+-; (Pig kidney) (Berberián, G. (1103) 85)

Potassium ion / proton antiport
Brush-border membrane; Chloride/proton symport; pH regulation; Proton flux; Pyranine; (Guinea-pig ileum) (Vasseur, M. (1107) 150)

Potassium ion–proton exchange
Mitochondrion; Proteoliposome; Yeast (Manon, S. (1108) 169)

Potassium ion regulation
Hepatic cholic acid; Cholic acid transport; pH regulation; Transmembrane pH gradient; Electrogenic transport (Veith, C.M. (1103) 51)

Potassium ion transport
Malaria; Erythrocyte; Calcium ion-activated potassium ion channel (Kirk, K. (1135) 8)

Potassium / sodium / chloride cotransporter
Ion transport; Kidney; Cell signaling; A6 cell (Fan, P.Y. (1111) 75)

Potential-sensitive styryl dye
Membrane fragment; Monomer/dimer equilibrium; Electrochromism; ATPase, Na^+/K^+-; Membrane probe; Fluorescence (Clarke, R.J. (1112) 142)

Potentiation
Pepsinogen secretion; Adenylyl cyclase; Signal transduction (Raufman, J.-P. (1135) 61)

pp60$^{c\text{-}src}$
Homeobox gene; Homeodomain protein; HOX4A; *zerknullt*; (Human) (Taniguchi, Y. (1132) 332)

P_2 purinoceptor
Prostacyclin; Calcium; Phospholipase A_2; ATP; (Endothelial cell) (Lustig, K.D. (1134) 61)

Precursor protein
α_1-Microglobulin; Bikunin; Intracellular cleavage; mRNA; (Rat liver cDNA) (Lindqvist, A. (1130) 63)

Inter-α-trypsin inhibitor; Glycosaminoglycan chain; cDNA; PCR; (Human) (Diarra-Mehrpour, M. (1132) 114)

Pregastric lipase
β-Lactoglobulin; Fatty acid; (Ruminants milk) (Perez, M.D. (1123) 151)

Pregnancy
Hyperlipidemia; Docosahexaenoic acid; Adipose tissue; Fetus (Chen, Z.-Y. (1127) 263)

Pregnancy-specific β_1-glycoprotein-11s
cDNA sequence; RGD peptide motif (Brophy, B.K. (1131) 119)

Preimplantation conceptus
Membrane transport; L-Glutamate; L-Cystine; (Preimplantation embryo) (Van Winkle, L.J. (1107) 299)

Premature delivery
Ceruloplasmin; Gene expression; Liver; Lung; Organ development; (Guinea-pig) (Bingle, C.D. (1139) 217)

Preproenkephalin gene
Z-DNA; Transcriptional control; (Rat) (Durkin, R.C. (1131) 349)

Preputial gland
Transforming growth factor-α; Tissue distribution; DNA sequence; (Mouse bladder) (Vaughan, T.J. (1132) 322)

Preputial gland peroxidase
Lactoperoxidase; Enzyme purification; Peroxidase; (Rat) (De, P.K. (1120) 167)

Pressure adaptation
Fluorescence anisotropy; DPH; Myelin; Membrane fluidity; Homeoviscous adaptation (Behan, M.K. (1103) 317)

Pre-steady-state kinetics
NADH-ubiquinone oxidoreductase; Respiratory chain; Calcium ion; (Bovine heart mitochondria) (Kotlyar, A.B. (1098) 144)

ATPase, Na^+/K^+-; Magnesium ion; ATP; Substrate; Phosphorylation; (Pig kidney) (Campos, M. (1105) 51)

Primaquine
Superoxide; Red blood cell; Thalassemia; Oxidative stress (Grinberg, L.N. (1139) 248)

Primary adhesion domain
Von Willebrand factor; DNA sequence; (Bovine) (Bakhshi, M.R. (1132) 325)

Primary cell culture
Androgen synthesis; Bovine adrenal; Cytochrome $P\text{-}450_{17\alpha,\text{lyase}}$; Steroidogenesis (Yamazaki, T. (1134) 143)

Primary cyclic alcohol
Phospholipid; PAF-acether; Transphosphatidylation; Phospholipase D; (*S.* sp.) (Testet-Lamant, V. (1123) 347)

Primary electron acceptor
Green sulfur bacterium; Pigment analysis; Bacteriochlorophyll 663; Chlorophyll *a* (Van de Meent, E.J. (1102) 371)

Primary electron donor
Fluorescence; Bacteriochlorophyll; Redox state; (*Rps. viridis*) (Deinum, G. (1099) 81)

Primary structure
ATPase, H^+-; Catalytic subunit; Brush-border membrane; (Kidney) (Sander, I. (1112) 129)

Amino-acid sequence; Lectin; Skin mucus; Fish lectin; (Conger eel) (Muramoto, K. (1116) 129)

Amino acid sequence; Growth hormone; Protein purification (Yasuda, A. (1120) 297)

Firefly luciferase; recombinant DNA; (*L. cruciata*); (*P. pyralis*) (Tatsumi, H. (1131) 161)

Primary structure modification
Surfactant-associated protein; SP-A; SP-B; SP-C; Proteinosis; Plasma desorption mass spectrometry (Voss, T. (1138) 261)

Primase
DNA replication; Protein overproduction; Zinc finger; (*E. coli*) (Stamford, N.P.J. (1132) 17)

Primer extension
rRNA gene, 16S; DNA sequence; Internal promoter; *rrn* operon; (*Streptomyces*); (*E. coli*-like promoter) (Chang, S.-C. (1129) 219)

Principal component analysis
Photosystem I; Photosystem II; Electron pathway; Electron donor; Electron acceptor (Otsuka, J. (1118) 194)

Principal σ factor
Nucleotide sequence; *rpoD* gene; (*Synechococcus*) (Tanaka, K. (1132) 94)

Prion protein
Scrapie-associated fibril-protein; HIV; Transactivation; Astrocyte; Encephalopathy (Müller, W.E.G. (1139) 32)

Pristanic acid
Phytanic acid; Peroxisome; Peroxisomal disorder; Fatty acid oxidation; (Rat liver) (Wanders, R.J.A. (1125) 274)

Probasin
Monoclonal antibody; Prostate (Nishi, N. (1117) 47)

Probucol
Antioxidant; Lipid peroxidation (Gotoh, N. (1128) 147)

Procainamide
Anti-arrhythmic drug; Organic cation transport; Renal secretion; Drug interaction; Proton/organic cation antiport; Aminocephalosporin; (LLC-PK_1) (Takano, M. (1108) 133)

Processive synthesis
HIV; Reverse transcriptase; Viral replication; Retrovirus; AIDS (DeStefano, J.J. (1131) 270)

Procion Red HE3B
Aspartate transcarbamoylase; Enzyme inactivation; (Wheat germ) (Easton, M.J. (1118) 298)

Proclotting enzyme
Dorso-ventral polarity; Easter proteinase; Toll receptor; (*Drosophila*) (Gay, N.J. (1132) 290)

Procolipase
Colipase; Fat digestion; Bile salt; Enterostatin; Activation peptide; Satiety signal (Erlanson-Albertsson, C. (1125) 1)

Profilin-actin complex
Phosphatidylinositol 4-monophosphate; Magnesium ion (Katakami, Y. (1122) 123)

Progesterone
Sperm membrane; Acrosome reaction; Estradiol; Testosterone (Shivaji, S. (1108) 99)

Kininogen; Kallikrein; Estrogen; Gene expression; (Rat) (Chen, L.-M. (1131) 145)

Programmed cell death
Bcl-2; Oncoprotein; Mitochondrion; Nucleotide sequence; Apoptosis; (Chicken) (Cazals-Hatem, D.L. (1132) 109)

Apoptosis; Necrosis; Flow cytometric analysis; Heterogeneity (Dive, C. (1133) 275)

Proliferating
Lipid metabolism; Choline; Ethanolamine; NMR, ^{31}P-; NMR, ^{13}C-; T47D; Spheroid; Quiescent (Ronen, S.M. (1138) 203)

Proliferating Cell Nuclear Antigen (PCNA)
Nucleic acid sequence; Gene promoter; Transcriptional regulation; CAT assay; (Rat) (Ohashi, Y. (1130) 175)

Proliferation
Poly(ADPR)polymerase; Expression; Differentiation; bFGF; NGF; (Rat astrocyte); (Rat neuron) (Chabert, M.G. (1136) 196)

Proline
Intestinal transport; Imino acid; Imino acid carrier; (Rabbit intestine) (Munck, L.K. (1116) 91)

Proline carrier
putP gene; Coupling cation; Secondary active transport; Sodium ion/proline symport; (*E. coli*) (Hanada, K. (1105) 61)

D-Proline
D-Alanine; D-Serine; D-Isomer; HPLC (Nagata, Y. (1115) 208)

L-Proline
Amino acid uptake; Caco-2; Carrier mediated transport; Sodium dependence; (Human intestine) (Nicklin, P.L. (1104) 283)

Proline rich protein
CNS development; Down-regulation of expression; Gene expression (Sazuka, T. (1132) 240)

Prolonged circulation
Circulation time; Drug delivery; Liposome; Phospholipid derivative; (Mouse) (Park, Y.S. (1108) 257)

Promoter
Gene regulation; *cis*-acting sequence; Tissue specific gene expression; α-Fetoprotein (Rabek, J.P. (1130) 317)

DNA methylation; Gene expression; *dam* gene; Transcription; (*E. coli*) (Wu, T.-H. (1131) 47)

Atherosclerosis; Reverse cholesterol transport; High density lipoprotein; Enhancer; Genomic sequence (Murray, R.W. (1131) 207)

In vitro transcription; Laminin B1 gene; Transcription control; (Mouse) (Okano, R. (1132) 49)

tRNA gene; Archaeon; Methanogen; Hyperthermophile (Palmer, J.R. (1132) 315)

Promoter region
Nucleotide synthesis; Phosphoribosyl pyrophosphate synthetase; Ribose-phosphate pyrophosphokinase; Cell-specific expression; Housekeeping gene; (Human) (Ishizuka, T. (1130) 139)

Promyelocyte
Vitamin D receptor; Calcium; Vitamin D; Leukemia (Goto, H. (1132) 103)

Propanediol oxidoreductase
Metal-catalyzed oxidation; (*E. coli*) (Cabiscol, E. (1118) 155)

Prosegment peptide
Zymogen; Aspartic proteinase; Activation; Sequence homology (Foltmann, B. (1121) 75)

Prostacyclin
Prostaglandin E_2; Sarcolemma; Iloprost; (Heart) (Lerner, R.W. (1105) 189)

HDL; HSA; Stabilization mechanism; Apo A-I (Tsai, A.-l. (1115) 131)

Thromboxane; Prostaglandin E_2; Urine; Platelet; Vessel; Kidney; Aspirin; Immuno-affinity; Gas chromatography-mass spectrometry (Chiabrando, C. (1133) 247)

P_2 purinoceptor; Calcium; Phospholipase A_2; ATP; (Endothelial cell) (Lustig, K.D. (1134) 61)

Prostacylin receptor
Adenosine A_2 receptor; G_s; Desensitization (Keen, M. (1134) 157)

Prostaglandin
Vanadium; Chloride secretion; Intestinal electrolyte transport; Colon (Plass, H. (1107) 139)

Lipoxygenase; 8-Hydroxyicosatetraenoic acid; Icosanoid; (*C. maenas*) (Hampson, A.J. (1124) 143)

Lipoxygenase; Cyclooxygenase; Oxygenase; Arachidonic acid; Hydroperoxide; Leukotriene; Enzyme immunoassay; Complementary DNA (Yamamoto, S. (1128) 117)

Kupffer cell; Liver; Platelet-activating factor; Protein Kinase C (Gandhi, C.R. (1136) 68)

Glucocorticoid; Protein kinase C; Amnion; (Parturition); (Human) (Zakar, T. (1136) 161)

Prostaglandin B_1-oligomer
Phospholipase A_2; Arachidonic acid; Oleoylacetylglycerol; Phorbol myristate acetate; Aristolochic acid; (Human neutrophil) (Rosenthal, M.D. (1126) 319)

Prostaglandin E_2
Prostacyclin; Sarcolemma; Iloprost; (Heart) (Lerner, R.W. (1105) 189)

Prostaglandin metabolism; Prostaglandin $F_{2\alpha}$; (Human fetal membrane) (Sullivan, M.H.F. (1123) 342)

Thromboxane; Prostacyclin; Urine; Platelet; Vessel; Kidney; Aspirin; Immuno-affinity; Gas chromatography-mass spectrometry (Chiabrando, C. (1133) 247)

cyclic AMP; Collagen (Fine, A. (1135) 67)

Bradykinin; Arthritis; Inflammation; Osteoblast-like cell; Interleukin-6; Interleukin-1; (Human) (Rahman, S. (1135) 97)

Articular chondrocyte; Interleukin-1; Purinoceptor, P_2 (Caswell, A.M. (1137) 52)

OK-432; Arachidonic acid; Phagocytosis; Cytochalasin B; (Rat peritoneal macrophage) (Watanabe, M. (1138) 157)

***trans*-5-Prostaglandin E_2**
Plasminogen; Tissue-type plasminogen activator; Fibrinolysis; Stimulation (Shimokawa, M. (1137) 317)

Prostaglandin E_2 receptor
Insulin; P388D_1 cell line; cyclic AMP; cyclic AMP phosphodiesterase (Rae, M.G. (1135) 343)

Interleukin-1; P388D_1 cell line; cyclic AMP (Rae, M.G. (1138) 75)

Prostaglandin E_3
Icosapentaenoic acid; Reproduction; Cytochrome *P*-450; GC-MS (Oliw, E.H. (1126) 261)

Prostaglandin $F_{2\alpha}$
Prostaglandin metabolism; Prostaglandin E_2; (Human fetal membrane) (Sullivan, M.H.F. (1123) 342)

Prostaglandin H_2
Thromboxane A_2; Histamine H_1; Receptor; Smooth-muscle cell; Trachea; (Guinea pig) (Miki, I. (1137) 107)

Prostaglandin H synthase
Gene expression; Nonsteroidal anti-inflammatory drug; Naproxen; Endothelial cell (Zyglewska, T. (1131) 78)

Prostaglandin metabolism
Prostaglandin E_2; Prostaglandin $F_{2\alpha}$; (Human fetal membrane) (Sullivan, M.H.F. (1123) 342)

Prostaglandin 9-oxoreductase
Structure homology; Androgen metabolism: Species comparison; (Rat) (Inazu, N. (1116) 50)

Prostaglandin receptor
Solubilization; Sarcolemma; Heart (Michalak, M. (1111) 247)

Prostaglandin synthesis
Inhibitor; (Human endothelial cell) (Revtyak, G.E. (1123) 216)

Prostate
Probasin; Monoclonal antibody (Nishi, N. (1117) 47)

Kallikrein; Tonin; Kininogenase (Wang, C. (1121) 309)

Aldehyde dehydrogenase; Carcinoma; Benign prostatic hypertrophy; Biogenic aldehyde metabolism; (Human) (Ryzlak, M.T. (1139) 287)

Protamine
Histone; Amino acid sequence; (*E. minor*) (Giancotti, V. (1119) 296)

Protamine 2
Alternative splicing; Nuclear protein (Kremling, H. (1132) 133)

Proteasome
Multicatalytic proteinase; Macropain; Proteinase inhibitor; Ubiquitin (Chu-Ping, M. (1119) 303)

Protein
Aging; Senescence; Two-dimensional electrophoresis; SMP30; (Rat liver) (Fujita, T. (1116) 122)

Fibronectin; Heparin binding; DNA binding; Unfolding (Litvinovich, S.V. (1119) 57)

High pressure; Temperature; Aggregation; Secondary structure; Infrared spectroscopy; Denaturation (Ismail, A.A. (1121) 183)

Radical damage; Endocytosis; Hydrolysis; Proteolysis (Grant, A.J. (1134) 203)

Protein adsorption
Circular dichroism; Quartz/liquid interface; Interface; Venom peptide; Melittin (Smith, L.J. (1121) 111)

Proteinase
ATPase, H^+-; Water transport; Sodium ion–proton exchange; Mercurial; Enzyme inhibition; Sodium ion/proton antiport; (Rat) (Sabolić, I. (1103) 137)

NMR; Subtilisin Carlsberg; Autolysis; Selective excitation; Spin echo (Consonni, R. (1119) 39)

Calpain; Proteolysis; Immunoblotting (Croall, D.E. (1121) 47)

Hemoglobin; Chloroquine; Ferriprotoporphyrin IX; Malaria; (*P. falciparum*) (Vander Jagt, D.L. (1122) 256)

Thermophile; Thermostability; Archaebacterium; (*S. solfataricus*) (Burlini, N. (1122) 283)

Gene regulation; T lymphocyte; Cytotoxicity (Prendergast, J.A. (1131) 192)

Glycoprotein; (*T.b. brucei*) (Huet, G. (1138) 213)

Proteinase-catalyzed activation
Pyruvate dehydrogenase; Limited proteolysis; Proteinase-cleavage site; (Porcine heart muscle) (Koike, K. (1118) 223)

Proteinase-cleavage site
Pyruvate dehydrogenase; Limited proteolysis; Proteinase-catalyzed activation; (Porcine heart muscle) (Koike, K. (1118) 223)

Proteinase inhibitor
Proteasome; Multicatalytic proteinase; Macropain; Ubiquitin (Chu-Ping, M. (1119) 303)

Calpastatin; Calpain; cDNA; (Rat) (Lee, W.J. (1129) 248)

α_1-Proteinase inhibitor
Elastase; Pancreas; Oxidation; Elastin (Padrines, M. (1118) 174)

Proteinase K
Fluorescence; X-ray model; Photooxidation; Emission quenching; Energy transfer (Dolashka, P. (1118) 303)

Proteinase nexin II
Alzheimer; Amyloid precursor protein; (Mouse) (De Strooper, B. (1129) 141)

Proteinase, sequence
Adenovirus, murine; Proteinase, viral; Proteinase, thiol (Cai, F. (1129) 339)

Proteinase, thiol
Adenovirus, murine; Proteinase, viral; Proteinase, sequence (Cai, F. (1129) 339)

Proteinase, viral
Adenovirus, murine; Proteinase, sequence; Proteinase, thiol (Cai, F. (1129) 339)

Protein assembly
DNA sequencing; Hydrogen oxidation; Redox; Electron carrier; Ni, FeS cluster; *hox* (Chen, J.C. (1131) 122)

DNA sequencing; Hydrogenase; Ni, FeS cluster; Electron carrier; (*A. vinelandii*) (Chen, J.C. (1131) 199)

Protein blotting
Catalase; Peroxisome; Differentiation; (Rat ovary); (Pig ovary) (Peterson, S.L. (1135) 207)

Protein C
cDNA cloning; Gene expression; (Rat kidney) (Okafuji, T. (1131) 329)

Protein carboxylmethyltransferase
Guanine nucleotide (Gingras, D. (1136) 150)

Protein characterization
Microtubule-binding protein; Pancreas (Michalik, L. (1116) 269)

Immunochemistry; Toxicology; Cytochrome *P*-450; (Human fetal liver) (Kitada, M. (1117) 301)

Developmental regulation; Liver protein; (Rat liver) (Srinivas, U.K. (1119) 281)

Phosphofructokinase; Protein dephosphorylation; (*Ascaris*) (Daum, G. (1122) 23)

Tryptic peptide; Ribonuclease inhibitor; HPLC (Crevel-Thieffry, I. (1122) 107)

Protein conformation
Halogenated alcohol; Infrared spectroscopy (Jackson, M. (1118) 139)

Infrared spectroscopy; FTIR; Amide (Bandekar, J. (1120) 123)

Seed protein; Repetitive sequence; Beta-turn; Beta-spiral; Supersecondary structure (Halford, N.G. (1122) 118)

Histone H1; Histone structure; (Rat liver); (Rat testis) (Baubichon-Cortay, H. (1122) 167)

Hydrophobic chromatography; Protein purification; Lysozyme; α-Lactalbumin; Metalloprotein (Haezebrouck, P. (1122) 305)

Unsaturated fatty acid; Heparin; α-Fetoprotein; Estrogen binding; Immunodetection; (Human) (Haourigui, M. (1125) 157)

Protein content
Lens; Refractive index; Optical performance; (Bovine) (Pierscionek, B.K. (1116) 283)

Protein degradation
Muscle dystrophin; Skeletal muscle; Protein structure; (Chicken gizzard) (Augier, N. (1138) 297)

Protein dephosphorylation
Phosphofructokinase; Protein characterization; (*Ascaris*) (Daum, G. (1122) 23)

Glucocorticoid; Protein synthesis; Protein phosphorylation; Antigen; (Rat basophilic leukemia cell) (Her, E. (1133) 63)

Protein–DNA interaction
DNA curvature; Gene expression; DNA bending; DNA flexibility (Hagerman, P.J. (1131) 125)

Protein domain
Fluorescence microscopy; Phospholipase A_2; Monolayer; Phospholipid; Lysolipid; Fatty acid (Reichert, A. (1106) 178)

α-Crystallin; Aggregate formation; Protein engineering; Heat shock protein (Merck, K.B. (1130) 267)

Protein domain organization
5′-Nucleotidase; Limited proteolysis; Affinity labeling; N-linked carbohydrate (Stochaj, U. (1122) 327)

Protein engineering
Dihydrolipoyltransacetylase; Pyruvate dehydrogenase complex; Purification; Electron microscopy (Schulze, E. (1120) 87)

Epidermal growth factor; Site-directed mutagenesis; Human epidermal growth factor receptor; NMR (Koide, H. (1120) 257)

α-Crystallin; Protein domain; Aggregate formation; Heat shock protein (Merck, K.B. (1130) 267)

Protein evolution
ATPase, V-type; Molecular cloning; (*T. thermophilus*) (Tsutsumi, S. (1098) 13)

Membrane-bound alkaline phosphatase; cDNA sequence; Silkworm; (*Bombyx mori*) (Itoh, M. (1129) 135)

Protein expression
Bovine liver rhodanese; Recombinant rhodanese; Protein purification; Chaperonin; Protein folding; (*E. coli*) (Miller, D.M. (1121) 286)

Protein folding
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Bovine liver rhodanese; Recombinant rhodanese; Protein purification; Protein expression; Chaperonin; (*E. coli*) (Miller, D.M. (1121) 286)

Protein import
Mitochondrion; Energy requirement; Matrix pathway (Glick, B.S. (1101) 249)

Protein, 33 kDa
Photosystem II; Thermoluminescence; Oxygen evolution; Photoinhibition (Vass, I. (1102) 195)

Protein kinase
Photoaffinity labeling; GTP analog; (Rat heart); (Rat brain) (Ichida, S. (1106) 17)

Cholesterol metabolism; Fatty acid (Hardie, D.G. (1123) 231)

Differentiation; Cell cycle (Michaelis, C. (1132) 35)

Ether lipid; Leukemia; Second messenger; Tissue culture (Salari, H. (1134) 81)

t-PA; PAI-1; Protein kinase C; cyclic AMP-dependent protein kinase A; Plasminogen activator; (Mesangial cell) (Peraldi, M.-N. (1134) 189)

cyclic GMP; Enzyme structure; Enzyme regulation; Substrate phosphorylation (Hofmann, F. (1135) 51)

Exo-protein kinase; Endothelial cell; (Porcine aorta) (Hartmann, M. (1136) 189)

Murine small heat-shock protein hsp25; Phosphorylation; Ehrlich ascites tumor (Benndorf, R. (1136) 203)

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Protein kinase C
Protein kinase A; Liver plasma membrane; Phospholipid; (Rat) (Gavrilova, N.J. (1105) 328)

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Human platelet; Calcium pump; ATPase, $(Ca^{2+} + Mg^{2+})$-; Chlorotetracycline; Quin2; Phorbol 12-myristate 13-acetate; Calphostin C (Tao, J. (1107) 213)

Vasopressin; Sodium ion transport; Liver; Membrane vesicle; Phospholipase C (Piec, G. (1111) 27)

Transfection; Cationic liposome; Liposome (Farhood, H. (1111) 239)

Sodium ion–proton exchange; Vasopressin; Genistein; Tyrosine phosphorylation; Phorbol ester; Staurosporine; Blood platelet; (Human) (Aharonovits, O. (1112) 181)

Circular dichroism; Conformational change; Secondary structure (Shah, J. (1119) 19)

Magnetic field; Transcription; 60 Hz; T-lymphoblastoid cell; c-*fos*; c-*myc*; c-*jun* (Phillips, J.L. (1132) 140)

Platelet; Calcium ion, cytosolic, Thromboxane B_2; Dense granule release; PAF; Ionomycin (Murphy, C.T. (1133) 46)

Interleukin 1; Phorbol ester; Chondrocyte; Collagenase production (Conquer, J.A. (1134) 1)

Thrombin; GTP-binding protein; (Mastocytoma P-815 cell) (Takahashi, S. (1134) 17)

Tyrosine phosphorylation; Biliary-glycoprotein; Cell adhesion (Afar, D.E.H. (1134) 46)

Epidermal growth factor; Transcription; Proto-oncogene induction; *fos*; *jun* (Franklin, C.C. (1134) 137)

t-PA; PAI-1; cyclic AMP-dependent protein kinase A; Protein kinase; Plasminogen activator; (Mesangial cell) (Peraldi, M.-N. (1134) 189)

Plasminogen activator inhibitor 2; Leukemia cell line; cyclic AMP; Phorbol ester (Hayashi, T. (1134) 273)

Peroxisome; Calmodulin; Fatty acid oxidation; (Rat liver) (Watanabe, T. (1135) 84)

Glucocorticoid; Growth; Phospholipid turnover (Krasil'nikov, M.A. (1135) 91)

α_1-adrenergic; Cyclic AMP accumulation; (Obese Zucker rat) (García-Sáinz, J.A. (1135) 221)

Hepatocyte growth factor; Calcium ion, cytosolic, oscillation (Osada, S. (1135) 229)

Fibronectin; 12-*O*-tetradecanoylphorbol 13-acetate; Phorbol ester; Tumor promoter; Sphingosine; Calphostin C; (Fibroblast) (Scheidl, H. (1135) 295)

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Prostaglandin; Glucocorticoid; Amnion; (Parturition); (Human) (Zakar, T. (1136) 161)

TGF-β_1; Cell proliferation; Inhibition of proliferation; Adenocarcinoma; Breast cancer; (Human breast) (Guerrin, M. (1137) 116)

Protein kinase C activator
Serotonin; Membrane transport; (Human platelet) (Anderson, G.M. (1137) 331)

Protein kinase C-ϵ
Phorbol ester; Gene expression; Catalytic domain; Cloning (Basta, P. (1132) 154)

Protein kinase / phosphatase
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Protein–lipid interaction
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δ-Toxin; Phosphatidylcholine; NMR, ^{2}H-; NMR, ^{31}P- (Rydall, J.R. (1111) 211)

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Protein–membrane interaction
Calcium-binding protein; Phosphatidylinositol cycle; PIP_2; Phospholipase C; Calcium; Second messenger (Xu, C. (1120) 49)

Protein methylation
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Batten disease; Storage disease; ϵ-*N*-Trimethyllysine; Lysosome (Katz, M.L. (1138) 97)

Protein modification
Mitochondrion; Aspartate/glutamate carrier; Reconstitution; Carbodiimide; Carrier-mediated transport (Dierks, T. (1103) 13)

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Protein mutant
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Proteinosis
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Protein overproduction
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Protein penetration
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Protein phosphatase
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Protein phosphorylation
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Chlorophyll protein; Light-cold stress; Photoinhibition; Subfractionation; Thylakoid membrane fluidity (Carlberg, I. (1099) 111)

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Glucocorticoid; Protein synthesis; Protein dephosphorylation; Antigen; (Rat basophilic leukemia cell) (Her, E. (1133) 63)

ATP-sensitive K-channel; Sulfonylurea; Diazoxide; β-cell (Niki, I. (1133) 95)

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Myosin light chain; Phorbol ester; (Aortic smooth muscle) (Bárány, K. (1134) 233)

Tyrosine phosphorylation; Tyrosine dephosphorylation; Protein tyrosine phosphatase (Pot, D.A. (1136) 35)

Nitrate reductase; (Spinach leaf) (MacKintosh, C. (1137) 121)

Protein photolysis
Photosystem II; Reaction center; Ultraviolet-B radiation; Absorbance difference spectrophotometry; Immunoblot analysis; (Spinach thylakoids) (Melis, A. (1100) 312)

Protein–protein interaction
GroEL-like protein; Glutamine synthetase; Protein structure; Electron microscopy; Image analysis; (Pea) (Tsuprun, V.L. (1099) 67)

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Protein purification
Pigeon milk; Growth factor (Shetty, S. (1117) 193)

Calcium-dependent protein kinase; Phospholipid transfer protein; (Wheat); (Pine) (Polya, G.M. (1120) 273)

Amino acid sequence; Growth hormone; Primary structure (Yasuda, A. (1120) 297)

Bovine liver rhodanese; Recombinant rhodanese; Protein expression; Chaperonin; Protein folding; (*E. coli*) (Miller, D.M. (1121) 286)

Hydrophobic chromatography; Lysozyme; α-Lactalbumin; Metalloprotein; Protein conformation (Haezebrouck, P. (1122) 305)

Phospholipid transfer protein; (*N. crassa*) (Basu, J. (1126) 286)

Catechol-*O*-methyltransferase; Bacterial expression; Active recombinant protein; (*E. coli*) (Lundström, K. (1129) 149)

α_1-Antitrypsin; Insulin-dependent diabetes; Plasma; ATPase, Na^+/K^+-; (Human) (Finotti, P. (1139) 122)

Protein recycling
Chromaffin cell; Cycloheximide; Down regulation; Nitrobenzylthioinosine; Nucleoside transport; Protein turnover (Torres, M. (1105) 291)

Protein secondary structure
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Protein secretion
SecD; SecF; Secretion machinery (Matsuyama, S.-i. (1122) 77)

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Protein sequence
Lysosomal enzyme; Arylsulfatase; Post-translational processing (Fujii, T. (1122) 93)

Protein stability
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Protein structure
GroEL-like protein; Glutamine synthetase; Protein–protein interaction; Electron microscopy; Image analysis; (Pea) (Tsuprun, V.L. (1099) 67)

Lactose permease; Membrane transport; Deletion mutant (Kaback, H.R. (1101) 210)

Spirochete; Lyme disease; Outer surface protein; Circular dichroism; Fluorescence spectroscopy (France, L.L. (1120) 59)

Protein folding; Monoclonal antibody; Epitope mapping; ELISA; Synthetic peptide (Morris, G.E. (1120) 233)

Phospholipid transfer protein; α-Helix; Disulfide bridge; Secondary structure; (Wheat) (Désormeaux, A. (1121) 137)

Metmyoglobin; Polyanion binding; Hemichrome formation; Heteropolytungstate (Chottard, G. (1122) 113)

Genomic copy number; Developmental mRNA expression; Codon usage; Secondary and tertiary protein structure; Inverted PCR; Intron (Rogers, P.V. (1129) 262)

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Muscle dystrophin; Skeletal muscle; Protein degradation; (Chicken gizzard) (Augier, N. (1138) 297)

Protein synthesis
Elongation factor 2; ADP-ribosylation; Thermostability (Raimo, G. (1132) 127)

Glucocorticoid; Protein phosphorylation; Protein dephosphorylation; Antigen; (Rat basophilic leukemia cell) (Her, E. (1133) 63)

Protein thiolation
Liposome; Homing device glu-plasminogen; Glu-plasminogen (Heeremans, J.L.M. (1117) 258)

Protein transport
Secretion granule; Membrane permeability (Goncz, K.K. (1109) 7)

Protein turnover
Chromaffin cell; Cycloheximide; Down regulation; Nitrobenzylthioinosine; Nucleoside transport; Protein recycling (Torres, M. (1105) 291)

Protein tyrosine kinase
CD4; PMA; Tyrosine kinase; Receptor internalization (Yoshida, H. (1137) 321)

Protein tyrosine phosphatase
Protein phosphorylation; Tyrosine phosphorylation; Tyrosine dephosphorylation (Pot, D.A. (1136) 35)

Protein unfolding
Cytochrome *P*-450; Circular dichroism; Multichannel detection (Nölting, B. (1100) 171)

Proteinuria
Glomerular basement membrane; Ultrafiltration; Cross-linking; Fibre-matrix hypothesis; Pore theory; Glomerulonephritis; Dimethylmalonimidate; Glutaraldehyde (Walton, H.A. (1138) 173)

Proteoglycan
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Myoepithelial cell; Structural analysis; Immunofluorescence; Immunolocalization; (mammary gland) (Warburton, M.J. (1117) 291)

Decorin; cDNA sequence; (Rat) (Abramson, S.R. (1132) 225)

Endothelial cell; Conditioned medium; Vascular smooth muscle cell (Vijayagopal, P. (1135) 129)

Insulin-like growth factor-I, IGF-1; Articular cartilage; Aggrecan; Link protein; Hyaluronan; (Human) (Curtis, A.J. (1135) 309)

Extracellular matrix; Chondroitin sulfate; Cellular adhesion; (Hemopoietic stem cell) (Shirota, T. (1136) 17)

Tachykinin; Bovine articular chondrocyte; Substance P (Halliday, D.A. (1137) 29)

Brefeldin A; Fibroblast; Glycosaminoglycan; Suramin (Fransson, L.-Å. (1137) 287)

Heparan sulfate proteoglycan; Schistosomiasis; Granuloma (Silva, L.-C.F. (1138) 133)

Heparan sulfate proteoglycan; Dermatan sulfate proteoglycan; Schistosomiasis; Granuloma; Liver connective tissue (Silva, L.-C.F. (1139) 96)

Proteoliposome
Reconstitution; Galactose transport; Binding protein dependence; (*S. typhimurium*) (Richarme, G. (1104) 201)

Integral membrane protein; Dextran derivative; Hydrophobic anchor group (Elferink, M.G.L. (1106) 23)

Sarcoplasmic reticulum; ATPase, Ca^{2+}-; Detergent; Membrane protein reconstitution (Lévy, D. (1107) 283)

ATPase, H^+-; Transmembrane protein topography; (*N. crassa*) (Rao, U.S. (1108) 153)

Potassium ion–proton exchange; Mitochondrion; Yeast (Manon, S. (1108) 169)

Proteolysis
Cellobiose oxidase; Cellobiose:quinone oxidoreductase; (*P. chrysosporium*) (Wood, J.D. (1119) 90)

Calpain; Proteinase; Immunoblotting (Croall, D.E. (1121) 47)

Raw-starch-digesting amylase; Amylase; Subtilisin digestion; Hydrolytic domain; Peptide; Active site; (*B. circulans* F-2) (Kim, C.-H. (1122) 243)

DNA polymerase; Activity gel analysis; (*S. aureofaciens*) (Košovský, J. (1129) 287)

Radical damage; Endocytosis; Protein; Hydrolysis (Grant, A.J. (1134) 203)

Proteose peptone
Tissue plasminogen activator; Human embryonic fibroblast; Induction; Arachidonic acid; Lipoxygenase (Suzuki, A. (1133) 167)

Proton
ATPase; Protonmotive force; Photosynthesis; (Chloroplast) (Griwatz, C. (1101) 244)

Protonation change
Cytochrome *c* oxidase; P state; F state (Mitchell, R. (1101) 188)

Proton conductance
Brown adipose tissue; Phospholipid composition ; Mitochondrion; GDP binding; Uncoupling protein; Energization parameter (Goubern, M. (1107) 159)

Proton / dipeptide cotransport
Fluorescence; Acridine orange; Intestine; (Eel) (Verri, T. (1110) 123)

Proton effect
Light harvesting; Reaction center; Localized proton; Photosystem II (Ehrenheim, A.M. (1100) 299)

Proton flux
Brush-border membrane; Chloride/proton symport; Potassium ion/proton antiport; pH regulation; Pyranine; (Guinea-pig ileum) (Vasseur, M. (1107) 150)

Proton gradient
Chlorophyll *a* fluorescence lifetime; Fluorescence quenching; Photosystem II; Photosynthesis; Charge recombination (Krieger, A. (1102) 167)

Proton–lipid interaction
M13 coat protein; Lipid morphology; NMR, ^{2}H- (Sanders, J.C. (1110) 218)

Protonmotive force
Transhydrogenase; Photosynthetic bacterium; Chromatophore; Nicotinamide nucleotide; Energy coupling; (*Rb. capsulatus*) (Palmer, T. (1098) 21)

ATP synthesis; Sodium bioenergetics; Decarboxylation phosphorylation; $\Delta\tilde{\mu}_{H^+}$; $\Delta\tilde{\mu}^+_{Na}$ (Dimroth, P. (1101) 236)

ATPase; Proton; Photosynthesis; (Chloroplast) (Griwatz, C. (1101) 244)

Chloride transport; Yeast; Vacuolar acidification; pH (Wada, Y. (1101) 296)

Proton / organic cation antiport
Anti-arrhythmic drug; Organic cation transport; Renal secretion; Drug interaction; Aminocephalosporin; Procainamide; (LLC-PK$_1$) (Takano, M. (1108) 133)

Proton potential
Polyamine transport; Vacuolar membrane vesicle; (*S. cerevisiae*) (Kakinuma, Y. (1107) 126)

Proton pump
Charge density; Transport; Membrane (Sitaramam, V. (1098) 336)

Transhydrogenase; Binding site; NAD(H); NADP(H); Photoaffinity labeling; Mitochondrion (Hu, P.-S. (1102) 19)

ATPase; ATPase, H^+-; Liposome; Reconstitution; Tonoplast; Vacuole; (*Kalanchoë*) (Warren, M. (1106) 117)

Gastric ATPase; ATPase; Somatostatin; Omeprazole (Tari, A. (1129) 49)

Proton pumping
Thiamin pyrophosphatase; ATPase, H^+-; Pyrophosphatase; Golgi apparatus; Free-flow electrophoresis; Electrophoresis, free flow; (Rat liver) (Brightman, A.O. (1104) 188)

Proton release
Glutamate dehydrogenase; Hydride transfer; Enzyme kinetics (Fisher, H.F. (1119) 52)

Proton secretion
Ascorbate; Ascorbate free radical; Dehydroascorbate; Membrane potential; (*A. cepa*) (González-Reyes, J.A. (1098) 177)

Proton symport
ATPase, H^+-; Heavy water; Diethylstilbestrol; (*S. cerevisiae*) (Kotyk, A. (1104) 293)

Proton transfer
Carbonic anhydrase; Isoenzyme; Enzyme kinetics; Buffer effect; Mechanism model (Ren, X. (1120) 81)

Carbonic anhydrase; Mutagenesis; Enzyme kinetics; (Human) (Engstrand, C. (1122) 321)

Proton translocation
ATP synthase, F_1F_0-; Subunit *c*; Energy transduction (Fillingame, R.H. (1101) 240)

ATP synthase; Oligomycin; Mitochondrion; (Plant) (Hamasur, B. (1101) 339)

Bacterium; Reaction center; Quinone; (Purple bacteria) (Hanson, D.K. (1102) 260)

Proton transport
Thylakoid membrane; Ionic current; Patch-clamp; Nigericin; (*P. metallica*) (Bulychev, A.A. (1099) 16)

Monensin; Liposome; Membrane; Ion transport; Temperature jump (Prabhananda, B.S. (1106) 171)

Proto-oncogene
Cellular slime mold; *ras* gene; Developmental regulation (Robbins, S.M. (1130) 85)

Hepatocyte; AT_1-receptor; Angiotensin II receptor; Phorbol ester; c-*fos* (González-Espinosa, C. (1136) 309)

Polyhedrin promoter; Baculovirus expression (Peakman, T.C. (1138) 68)

Proto-oncogene induction
Epidermal growth factor; Transcription; Protein kinase C; *fos*; *jun* (Franklin, C.C. (1134) 137)

Protoplast
Ultramicroelectrode; Intracellular oxygen; Light irradiation; Alga; Oxygen (Matsue, T. (1101) 69)

Protozoan parasite
rRNA gene, 18S; DNA sequence; Oocyst; (*C. parvum*); (*C. muris*) (Cai, J. (1131) 317)

Pseudogene
Folate binding protein; Gene; Folate (Sadasivan, E. (1131) 91)

Pseudo vitamin D deficiency
Brush-border membrane vesicle; Calcium ion transport; 1,25-Dihydroxyvitamin D-3; Rickets (Kaune, R. (1109) 187)

Psoralen
Vitamin E; Photooxidation; Singlet oxygen (Costantini, C. (1116) 291)

PSTI
Monitor peptide; Genomic cloning; Sequence analysis; (Rat) (Tsuzuki, S. (1132) 199)

Psychotropic drug
Heat shock protein; (*E. coli*) (Tanji, K. (1129) 172)

Psychrotrophic bacterium
Subtilisin; DNA sequence; Cold adaptation (Narinx, E. (1131) 111)

Pterin
Interleukin 2 receptor; Tetrahydrobiopterin; Neopterin; Molecular modelling; Conformational analysis (Ziegler, I. (1135) 330)

***pufX* gene**
Photosynthetic unit; (*R. capsulatus*) (Lilburn, T.G. (1100) 160)

Pulmonary surfactant
Hydrophobic surfactant protein; Surfactant protein; Lipid mixing (Oosterlaken-Dijksterhuis, M.A. (1110) 45)

Neonatal respiratory distress syndrome; Surfactant associated protein C; Alternative splicing; Lung; Phospholipid (Connelly, I. (1127) 199)

Pulsed static magnetic field
Pineal gland; Melatonin; *N*-Acetyltransferase activity; Serotonin (Richardson, B.A. (1137) 59)

Pump conductance
Lipid solubility; Local anesthetic; Resting depolarization; Use-dependent depolarization; (*Chara corallina*) (Nosaka, S. (1106) 325)

Pump-probe spectroscopy
Antenna; Chlorophyll; Photosystem II; Polarized light spectroscopy (Kwa, S.L.S. (1101) 143)

Antenna; Chlorophyll; Light harvesting complex; Photosystem II; Plant photosynthesis; Ultrafast spectroscopy (Kwa, S.L.S. (1102) 202)

Purification
Serine/threonine messenger-independent protein kinase; Casein kinase; Mammary gland; Quercetin (Mitev, V.I. (1117) 90)

Glucose-6-phosphate dehydrogenase; Expression; (*E. coli*) (Bautista, J.M. (1119) 74)

Deoxyribonuclease; Multiplicity; Urine; Isoelectric focusing (Yasuda, T. (1119) 185)

Dihydrolipoyltransacetylase; Pyruvate dehydrogenase complex; Protein engineering; Electron microscopy (Schulze, E. (1120) 87)

Barley; Lipoxygenase; Isoenzyme; Germination; Linoleic acid hydroperoxide (Doderer, A. (1120) 97)

Enzyme purification; β-Glucosidase; Substrate specificity; Kinetic constant; (*T. reesei*) (Chen, H. (1121) 54)

α-Sarcin; Expression vector; Recombinant α-sarcin; (*E. coli*) (Oka, T. (1130) 182)

Guanylyl cyclase; cyclic GMP; Retina (Horio, Y. (1133) 81)

Purine
Nucleobase transport; Nucleobase; Pyrimidine; Adenine; (*G. intestinalis*) (Ey, P.L. (1109) 179)

Purine catabolism
Uric acid; Allantoin; Separation procedure; Formate; (Rat liver) (Di Stefano, A. (1117) 1)

Purine nucleoside phosphorylase
Substrate/inhibitor property; Formycin A; Formycin B; Structure-activity relationship; Tautomeric form; Ionic form; (*E. coli*) (Bzowska, A. (1120) 239)

Purine nucleotide
ATP diphosphohydrolase; Platelet aggregation; Endothelium; Vascular smooth muscle (Côté, Y.P. (1139) 133)

Purinoceptor, P_2
Articular chondrocyte; Interleukin-1; Prostaglandin E (Caswell, A.M. (1137) 52)

Purple bacterium
Photosynthesis; Reaction center complex; Cytochrome; (*Rc. gelatinosus*) (Nitschke, W. (1100) 49)

***putP* gene**
Coupling cation; Secondary active transport; Proline carrier; Sodium ion/proline symport; (*E. coli*) (Hanada, K. (1105) 61)

Putrescine
Polyamine; Spermidine; Spermine; Polyamine transport; HTC cell; DH23b cell; α-Difluoromethylornithine; Polyamine feedback; Polyamine toxicity; Ornithine decarboxylase overproducer (Mitchell, J.L.A. (1136) 136)

Pyranine
Brush-border membrane; Chloride/proton symport; Potassium ion/proton antiport; pH regulation; Proton flux; (Guinea-pig ileum) (Vasseur, M. (1107) 150)

Pyrazole induction
Cytochrome *P*-450 2E1; Cytochrome *P*-450 2B1/B2; 4-Methylpyrazole induction; Time course of induction (Winters, D.K. (1117) 15)

Pyrene
Fluorescence; Blood platelet; Binding; Transbilayer incorporation; Platelet activation; (Bovine blood) (Kitagawa, S. (1107) 231)

Pyrene excimer
Membrane fluidity; Membrane asymmetry; Protein–lipid interaction; Spherocytosis (Celedon, G. (1104) 243)

Pyrene-labeled phospholipid
Phosphatidylserine decarboxylation; Liposome; Phospholipid transfer; Transfer protein, nonspecific lipid; Nonspecific lipid transfer protein; Mitochondrion; (Rat liver); (Ehrlich ascites tumor) (Jasińska, R. (1105) 207)

Pyrene-PC
Excimer method; Interdigitated gel phase; Phosphatidylcholine; Ethanol; Ethylene glycol (Yamazaki, M. (1106) 94)

Pyridoxal 5′-phosphate
GSTπ; Chemical modification; Active site lysine; (Human placenta) (Lo Bello, M. (1121) 167)

Pyridoxalphosphate-6-azophenyl-2′-sulfonic acid
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Pyridoxine 4′-β-galactobioside
Pyridoxine 5′-β-galactoside; Pyridoxine 4′-β-galactoside; (*S. singularis*) (Suzuki, Y. (1116) 67)

Pyridoxine 4′-β-galactoside
Pyridoxine 5′-β-galactoside; Pyridoxine 4′-β-galactobioside; (*S. singularis*) (Suzuki, Y. (1116) 67)

Pyridoxine 5′-β-galactoside
Pyridoxine 4′-β-galactoside; Pyridoxine 4′-β-galactobioside; (*S. singularis*) (Suzuki, Y. (1116) 67)

Pyrimidine
Nucleobase transport; Nucleobase; Purine; Adenine; (*G. intestinalis*) (Ey, P.L. (1109) 179)

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Queuosine
tRNA-guanine transglycosylase; Queuine; DNA methylation; 5-Azacytidine; Human tumor (Gündüz, U. (1139) 229)

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Calcium ion extrusion; Calcium ion flux; Calcium pump; ATPase, $(Ca^{2+} + Mg^{2+})$-; cyclic GMP; Chlorotetracycline; (Human platelet) (Johansson, J.S. (1105) 40)

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Quinone reductase
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Reaction center complex
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Receptor tyrosine kinase
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Recombinant rhodanese
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Reconstituted system
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Redox activity
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Complex formation; Electrostatic interaction; Model (Mus-Veteau, I. (1102) 353)

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α-Tocopherol; Antioxidant; Free radical; (Rat hepatocyte) (Matsura, T. (1127) 277)

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Erythrocyte deformability; Perfusion condition; Recirculation perfusion; (Rat jejunum) (Hutchison, J.D. (1115) 60)

Respiration control
VDAC modulator; Channel; Membrane permeability; Mitochondrion; Membrane permeability (Liu, M.Y. (1098) 255)

Respiratory capacity
Triiodothyronine; Hypothyroid; Hyperthyroid; Hepatocyte; Thyroid hormone (Gregory, R.B. (1098) 61)

Respiratory chain
NADH-ubiquinone oxidoreductase; Calcium ion; Presteady-state kinetics; (Bovine heart mitochondria) (Kotlyar, A.B. (1098) 144)

NADH:quinone reductase; Sodium pump; Two-electron reduction; One-electron reduction; (*V. alginolyticus*) (Hayashi, M. (1099) 145)

Respiratory chain-linked oxidative phosphorylation
Ischemia; Forebrain mitochondrion; Calcium homeostasis; Oxidative phosphorylation; (Rat) (Sciamanna, M.A. (1134) 223)

Respiratory distress syndrome
Surfactant-associated protein; Phospholipid; Liposome; Monolayer; Bilayer; Adsorption; Squeeze-out; Surface tension; Surface pressure; Calcium (Yu, S.-H. (1126) 26)

Resting depolarization
Lipid solubility; Local anesthetic; Pump conductance; Use-dependent depolarization; (*Chara corallina*) (Nosaka, S. (1106) 325)

Restricted diffusion
Plastoquinone; Electron transfer chain; Photosystem II; Plastocyanin; Grana; Stroma (Joliot, P. (1101) 1)

Plastoquinone; Photosystem II; Kok model; Integral protein; Perco lation theory (Lavergne, J. (1101) 13)

Electron transfer; Plastoquinone; Cytochrome *b/f*; Supercomplex; Q-cycle (Joliot, P. (1102) 53)

Restriction fragment length polymorphism
Type III hyperlipoproteinemia; Apolipoprotein (apo) E1; Apo E gene (Moriyama, K. (1128) 58)

Reticulocyte
Iron uptake; Transferrin; Reticulocyte maturation; (Rabbit) (Qian, Z.M. (1135) 35)

Reticulocyte maturation
Nucleoside transport; Nitrobenzylthioinosine binding (Liang, L. (1106) 189)

Iron uptake; Transferrin; Reticulocyte; (Rabbit) (Qian, Z.M. (1135) 35)

Reticuloendothelial system
Liposome; Ganglioside GM_1; Drug delivery (Liu, D. (1104) 95)

Liposome; Blood clearance; Tissue distribution (Oku, N. (1126) 255)

Liposome; Poly(ethylene glycol); Drug delivery system (Maruyama, K. (1128) 44)

Retina
Visual transduction; Rhodopsin; Transducin (Chabre, M. (1101) 260)

Isozyme; Isoform; Catalytic subunit, α; Axonal transport (Specht, S.C. (1118) 77)

Guanylyl cyclase; cyclic GMP; Purification (Horio, Y. (1133) 81)

Pigment epithelium; Porphyrin; Melatonin; Light adaptation (Durkó, I. (1135) 111)

Retinal
Membrane fusion; Disk membrane; Retinol; Membrane stability (Boesze-Battaglia, K. (1111) 256)

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Retinal, All-*trans*
Photoreception; Rhodopsin; (*E. gracilis*) (Gualtieri, P. (1117) 55)

Retinoic acid
Serum albumin; pK; Micelle (Noy, N. (1106) 151)

Lipid bilayer; Membrane; pK (Noy, N. (1106) 159)

Phase diagram; Phospholipid membrane; Retinol; DSC (Ortiz, A. (1106) 282)

Phase diagram; Phospholipid membrane; Retinol; DSC; NMR, ^{31}P- (Ortiz, A. (1112) 226)

Retinol; Retinal; Microsome; Cellular retinol binding protein; Dehydrogenase (Napoli, J.L. (1120) 183)

Growth factor; Gastrin releasing peptide; Lung surfactant; Lung development (Fraslon, C. (1123) 65)

Ceramide; Sphingomyelin; Sphingosine; (GH_4C_1 cell) (Kalén, A. (1125) 90)

TIMP; Synovial fibroblast; In vitro (Wright, J.K. (1133) 25)

Apoptosis; Di- and polyamine γ-glutamyl derivative; Cell proliferation (Piacentini, M. (1135) 171)

Retinol
Phase diagram; Phospholipid membrane; Retinoic acid; DSC (Ortiz, A. (1106) 282)

Membrane fusion; Disk membrane; Retinal; Membrane stability (Boesze-Battaglia, K. (1111) 256)

Phase diagram; Phospholipid membrane; Retinoic acid; DSC; NMR, ^{31}P- (Ortiz, A. (1112) 226)

Retinal; Retinoic acid; Microsome; Cellular retinol binding protein; Dehydrogenase (Napoli, J.L. (1120) 183)

Retro-binding
RNAase-A; X-ray refinement analysis; Enzyme-inhibitor complex; Dinucleotide analog (Aguilar, C.F. (1118) 6)

Retroconversion
Hepatocyte; Choline phosphoglyceride; Ethanolamine phosphoglyceride; Fatty acid metabolism; Arachidonic acid; Icosapentaenoic acid (Voss, A. (1127) 33)

Retroviral oncogene
ras; Autophosphorylation; Oncogene (Chung, H.-H. (1129) 278)

Retrovirus
HIV; Processive synthesis; Reverse transcriptase; Viral replication; AIDS (DeStefano, J.J. (1131) 270)

v-*fps*; Tyrosine; Kinase; Hematopoiesis; Interleukin-3 (Meckling-Gill, K.A. (1137) 65)

Reverse cholesterol transport
Apolipoprotein A-I; Apolipoprotein E; Enzyme immunoassay; Cholesterol; (WHHL rabbit) (Mezdour, H. (1127) 116)

Atherosclerosis; High density lipoprotein; Promoter; Enhancer; Genomic sequence (Murray, R.W. (1131) 207)

Reverse transcriptase
HIV; Processive synthesis; Viral replication; Retrovirus; AIDS (DeStefano, J.J. (1131) 270)

Reversibility
Phospholipase A_2; Activation mechanism; Large unilamellar vesicle; Porcine pancreatic phospholipase A_2; (Snake venom) (Bell, J.D. (1127) 208)

Reye's syndrome
Dicarboxylic acid; Omega oxidation; Beta oxidation; Ketosis; Valproate; (Rat mitochondria); (Rat peroxisome) (Mortensen, P.B. (1124) 71)

RGD
Fibrinogen; Integrin; GPIIIa-derived peptide; Platelet receptor; Von Willebrand factor (Cook, J.J. (1119) 312)

Echistatin; Fluorescence; Conformation (Brockel, C. (1122) 196)

RGD peptide motif
Pregnancy-specific β_1-glycoprotein-11s; cDNA sequence (Brophy, B.K. (1131) 119)

Rhodamine
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Rhodopsin
Visual transduction; Retina; Transducin (Chabre, M. (1101) 260)

Photoreception; Retinal, All-*trans*; (*E. gracilis*) (Gualtieri, P. (1117) 55)

Ribbon-like structure
Amphotericin B; Antifungal agent; Phospholipid; ABLC; Liposome (Perkins, W.R. (1107) 271)

Ribonuclease
RNAase T1; Kinetics (Georgalis, Y. (1118) 1)

Thermal denaturation; Cosolvent; Circular dichroism; (Secondary structure) (Lustig, B. (1119) 205)

Antipeptide antibody; Multiplicity; Immunoblotting; (Human urine) (Yasuda, T. (1121) 331)

Ribonuclease A
Folding kinetics; Folding intermediates; Secondary structure; Tertiary structure (Lustig, B. (1121) 229)

Ribonuclease III
RNA processing; Bacteriophage T7; Chemical synthesis of RNA (Nicholson, A.W. (1129) 318)

Ribonuclease inhibitor
Protein characterization; Tryptic peptide; HPLC (Crevel-Thieffry, I. (1122) 107)

cDNA cloning; Nucleotide sequence; mRNA; Northern blot; Tissue distribution; (Rat) (Kawanomoto, M. (1129) 335)

Ribonuclease T_1
Viscosity; Fluorescence quenching; Acrylamide; Gating mechanism (Somogyi, B. (1119) 81)

Ribonucleoprotein
Protein methylation; Methyltransferase; (Rat liver nucleus) (Rajpurohit, R. (1122) 183)

Ribose-phosphate pyrophosphokinase
Nucleotide synthesis; Phosphoribosyl pyrophosphate synthetase; Cell-specific expression; Promoter region; Housekeeping gene; (Human) (Ishizuka, T. (1130) 139)

Ribosomal acidic phosphoprotein
Casein kinase type II; Phosphorylation, in vitro; (*D. discoideum*) (Prieto, J. (1115) 6)

Ribosomal protein
L37a; Zinc finger motif; (Chicken) (Toku, S. (1132) 88)

Ribosomal protein gene
SecY gene; *L15* gene; Evolution; (*H. marismortui*); (Archaebacteria) (Arndt, E. (1130) 113)

Sequence analysis; (Yeast) (Hashimoto, T. (1132) 195)

Ribosomal protein S15
rig; Genome organization; DNA sequence; (Rat) (Takasawa, S. (1132) 228)

Ribosomal subunit, 30S
Codon–anticodon interaction; Poly(U); Poly(dT); Neomycin (Soldatkin, K.O. (1130) 38)

Ribosome
Mitochondrion; Mitochondrial disease; mtDNA; Translation; rRNA (Schon, E.A. (1101) 206)

Dielectric spectroscopy; Electrical conductivity (Bonincontro, A. (1115) 49)

Lipoamide dehydrogenase; Pyruvate dehydrogenase; Membrane transport; *pdhD*; (*Staphylococcus aureus*) (Hemilä, H. (1129) 119)

Electron microscopy; Image analysis; (Thermophile); (*Thermus aquaticus*) (Harauz, G. (1129) 207)

Thermophile; Fungus; Electron microscopy; Image analysis (Harauz, G. (1130) 289)

Thermophile; Electron microscopy; Image analysis; (Fungus) (Harauz, G. (1132) 58)

Ribulose 1,5-bisphosphate carboxylase
End-product inhibition; Metabolic oscillation; High enzyme concentration; Steady-state approximation (Ryde-Pettersson, U. (1119) 118)

Ricin
Liposome; Monensin; Intercalation; Cytotoxicity; Diphtheria toxin; Exotoxin A; (CHO cell); (*Pseudomonas*) (Madan, S. (1110) 37)

Ricin toxicity
Liposomal monensin; Blood clearance; Tissue distribution (Vasandani, V.M. (1116) 315)

Rickets
Brush-border membrane vesicle; Calcium ion transport; 1,25-Dihydroxyvitamin D-3; Pseudo vitamin D deficiency (Kaune, R. (1109) 187)

rig
Ribosomal protein S15; Genome organization; DNA sequence; (Rat) (Takasawa, S. (1132) 228)

Right-angle light scattering
Calcitonin; Sulfatide; Lipid–peptide interaction; Carboxyfluorescein leakage; Excimer/monomer ratio (Viani, P. (1106) 77)

RNA
Heme oxygenase; Gene expression (Kurata, S.-i. (1132) 255)

Oocyte; Calcium channel; Hybrid-arrest method; (*X. laevis*) (Singer-Lahat, D. (1137) 39)

RNA cleavage
Modified oligonucleotide; 2′-Deoxy-2′-fluoronucleoside; DNA/RNA-conformation; RNAase H (Schmidt, S. (1130) 41)

RNA deaggregation
TYMV RNA; RNA degradation; Light scattering; Sucrose gradient centrifugation (Sam, T. (1129) 64)

RNA degradation
TYMV RNA; RNA deaggregation; Light scattering; Sucrose gradient centrifugation (Sam, T. (1129) 64)

RNA polymerase III
Alu repeat; In vitro transcription; (Human) (Liu, W.-M. (1132) 306)

RNA processing
U6 snRNA; snRNA gene; Small nuclear RNA; (Potato) (Hu, Y. (1129) 90)

Ribonuclease III; Bacteriophage T7; Chemical synthesis of RNA (Nicholson, A.W. (1129) 318)

tRNA gene pair; polIII transcription; (Yeast) (Otter, C.A. (1131) 62)

Myoblast; Histone; Differentiation (Larson, D.E. (1131) 139)

RNA 3′ processing
Gene family; Minor small nuclear ribonucleoprotein particle; Transcription signal; (*Xenopus laevis*) (Phillips, S.C. (1131) 95)

mRNA
Expression; Phosphate transport; Brush-border membrane; Oocyte; (Rat kidney) (Al-Mahrouq, H.A. (1104) 83)

Acyl-CoA synthetase; Lipoprotein lipase; Mesenteric fat; Subcutaneous fat; (Zucker fatty rat) (Shimomura, I. (1124) 112)

Simvastatin; Ciprofibrate; Cholesterol synthesis; HepG2; Apoprotein-B; LDL-receptor; HMG-CoA reductase (Qin, W. (1127) 57)

Albumin; Hypercholesterolemia; (Rabbit liver) (Crespo, P. (1128) 77)

Ribonuclease inhibitor; cDNA cloning; Nucleotide sequence; Northern blot; Tissue distribution; (Rat) (Kawanomoto, M. (1129) 335)

Translation efficiency; Globin; Base pair; Untranslated region (Francès, V. (1130) 29)

α_1-Microglobulin; Bikunin; Precursor protein; Intracellular cleavage; (Rat liver cDNA) (Lindqvist, A. (1130) 63)

Cartilage; Collagen; Gene expression; Recombinant DNA; (Mouse) (Elima, K. (1130) 78)

α_2-HS-glycoprotein; Fetuin; Gene regulation; Development (Yang, F. (1130) 149)

cDNA; Globin, β-like; Ontogenic shift; (Hamster YSEC) (Li, H. (1130) 218)

Fibronectin; Integrin; Fibronectin alternative splicing; Cell differentiation; Muscle; Myogenesis; Polymerase chain reaction (Steffensen, B. (1137) 95)

mRNA analysis
Calmodulin; cyclic AMP; Gene regulation; Pheochromocytoma cell line; (Rat cell line) (Bai, G. (1130) 189)

mRNA editing
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mRNA stability
atp operon; Posttranscriptional control; mRNA structure; Endoribonuclease; Exoribonuclease; Transcriptional terminator; (*E. coli*) (Ziemke, P. (1130) 297)

bFGF; RT-PCR; Novel sequence (El-Din El-Husseini, A. (1131) 314)

mRNA structure
atp operon; Posttranscriptional control; mRNA stability; Endoribonuclease; Exoribonuclease; Transcriptional terminator; (*E. coli*) (Ziemke, P. (1130) 297)

SAT mRNA
Stress; Spermidine/spermine N^1-acetyltransferase; Ornithine decarboxylase; Posttranslational regulation; (Ehrlich ascites tumor cell) (Obayashi, M. (1131) 41)

rRNA
Mitochondrion; Mitochondrial disease; mtDNA; Ribosome; Translation (Schon, E.A. (1101) 206)

rRNA gene, 16S
DNA sequence; Internal promoter; *rrn* operon; Primer extension; (*Streptomyces*); (*E. coli*-like promoter) (Chang, S.-C. (1129) 219)

rRNA gene, 18S
DNA sequence; Protozoan parasite; Oocyst; (*C. parvum*); (*C. muris*) (Cai, J. (1131) 317)

17–25S rRNA intergenic region
Thermophilic alga; Secondary structure; (*C. caldarium*) (Elela, S.A. (1130) 339)

snRNA gene
U6 snRNA; RNA processing; Small nuclear RNA; (Potato) (Hu, Y. (1129) 90)

tRNA
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tRNA gene
mitochondrial DNA; Lysine tRNA; (Rapeseed) (Handa, H. (1130) 117)

Archaeon; Methanogen; Hyperthermophile; Promoter (Palmer, J.R. (1132) 315)

tRNA gene pair
polIII transcription; RNA processing; (Yeast) (Otter, C.A. (1131) 62)

tRNA-guanine transglycosylase
Queuine; Queuosine; DNA methylation; 5-Azacytidine; Human tumor (Gündüz, U. (1139) 229)

Serine tRNA
1-Methyladenosine; 5-Methoxyuridine; Modified nucleoside; (*B. subtilis*) (Matsugi, J. (1130) 333)

RNAase A
X-ray refinement analysis; Enzyme-inhibitor complex; Dinucleotide analog; Retro-binding (Aguilar, C.F. (1118) 6)

RNAase H
Modified oligonucleotide; 2′-Deoxy-2′-fluoronucleoside; RNA-cleavage; DNA/RNA-conformation (Schmidt, S. (1130) 41)

RNAase protection assay
α_2-Adrenoceptor subtype; Stable transfection; Cell line; [^{3}H]Rauwolscine binding; Adenylate cyclase activity (Marjamäki, A. (1134) 169)

RNAase T1
Ribonuclease; Kinetics (Georgalis, Y. (1118) 1)

Rodent genome
Long terminal repeat; Intracisternal A particle; Repetitive sequence; Gene regulation; Eukaryotic promoter (Furter, C.S. (1130) 213)

Rod outer segment
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Root lectin
Affinity chromatography; (Peanut); (*Arachis hypogaea*) (Kalsi, G. (1117) 114)

Rotational correlation time
Malignant hypothermia; Spin label; Erythrocyte; EPR; Order parameter (Cooper, P. (1139) 70)

Rough endoplasmic reticulum
Freeze-fracture; Membrane fusion; Phosphatidylinositol cycle (Kan, F.W.K. (1107) 331)

Rous sarcoma virus
Lateral diffusion; Fluorescence photobleaching recovery; (Chicken embryo fibroblast) (Boullier, J.A. (1107) 193)

***rpoD* gene**
Principal σ factor; Nucleotide sequence; (*Synechococcus*) (Tanaka, K. (1132) 94)

***rrn* operon**
rRNA gene, 16S; DNA sequence; Internal promoter; Primer extension; (*Streptomyces*); (*E. coli*-like promoter) (Chang, S.-C. (1129) 219)

RT-PCR
bFGF; mRNA stability; Novel sequence (El-Din El-Husseini, A. (1131) 314)

Rubidium ion occlusion
ATPase, Na^+/K^+-; Potassium ion occlusion; Occlusion; (Shark rectal gland) (Esmann, M. (1108) 247)

Ruthenium red
Intrinsic fluorescence; ATPase, Ca^{2+}-; Sarcoplasmic reticulum; Cation binding site (Moutin, M.-J. (1100) 321)

Ryanodine receptor
Spermine; Sarcoplasmic reticulum; Polyamine (Zarka, A. (1108) 13)

S

Saccharide
Endotoxin; Spin label; Macrophage (Jackson, S.K. (1135) 165)

Salicylate
Hydroxyl radical; Site specificity; Free radical; Dihydroxybenzoate; Phenylalanine (Gelvan, D. (1116) 183)

Salivary gland
Galactosyltransferase; Calcium ion; Calmodulin serine Kinase; DNA transcription factor (Lee, S.-W. (1135) 115)

Salivary phospholipid
Secretion; Adrenergic; Cholinergic mediation (Slomiany, B.L. (1124) 171)

Salt effect
Photosynthesis; Water oxidation; Charge separation; (*Synechococcus*) (Pauly, S. (1099) 203)

Sandhoff disease
Hexosaminidase; Tay-Sachs disease; Gene mutation; (Infantile) (McInnes, B. (1138) 315)

S-antigen
Arrestin; FTIR; Phototransduction; Secondary structure (Garcia-Quintana, D. (1122) 269)

Saposin
Sphingolipid activator protein; GM2-activator; Sulfatide activator; Glucosylceramidase activator; Sphingolipid; Sphingolipidose; Lysosome (Fürst, W. (1126) 1)

Saposin-C
Amino acid sequence; Structure-activity relationship; Spleen; Activator protein; Glycoprotein (Sano, A. (1120) 75)

α-Sarcin
Expression vector; Recombinant α-sarcin; Purification; (*E. coli*) (Oka, T. (1130) 182)

Sarcolemma
Prostaglandin E_2; Prostacyclin; Iloprost; (Heart) (Lerner, R.W. (1105) 189)

Prostaglandin receptor; Solubilization; Heart (Michalak, M. (1111) 247)

Sarcoplasmic reticulum
Ruthenium red; Intrinsic fluorescence; ATPase, Ca^{2+}-; Cation binding site (Moutin, M.-J. (1100) 321)

ATPase, Ca^{2+}-; ATPase, Na^+/K^+-; ATPase, H^+/K^+-; Transverse tubular membrane; Monoclonal antibody; Anti-peptide antibody (Molnar, E. (1103) 281)

Photolysis; ATPase, Ca^{2+}-; FTIR; Caged calcium; Caged ATP (Buchet, R. (1104) 207)

Anion binding; Magnesium ion; Phosphate; Pyridoxalphosphate-6-azophenyl-2′-sulfonic acid; Adenylyl imidodiphosphate; NMR, ^{35}Cl- (Janetzky, S.T. (1105) 278)

ATPase, Ca^{2+}-; Detergent; Proteoliposome; Membrane protein reconstitution (Lévy, D. (1107) 283)

Spermine; Ryanodine receptor; Polyamine (Zarka, A. (1108) 13)

ATPase, Na^+/K^+-; ATPase, Ca^{2+}-; ATPase, Mg^{2+}-; Cultured muscle cell; Maturation; (Human skeletal muscle) (Benders, A.A.G.M. (1112) 89)

Lanthanide binding; Fluorescein isothiocyanate; Catalytic site; ATPase, Ca^{2+}- (Ivkova, M.N. (1118) 231)

Calsequestrin; Casein kinase II; Myotube; Development; (Muscle) (Cala, S.E. (1118) 277)

Acetylcholinesterase; Alkaline solubilization; Amphiphilic monomer (Moya-Quiles, M.R. (1121) 88)

ATPase, $(Ca^{2+} + Mg^{2+})$-; cDNA; Cardiac; Nucleotide sequence (Gambel, A.M. (1131) 203)

Sarcoplasmic reticulum function
ATPase, Ca^{2+}-; Gene expression; Cardiac plasma membrane; Cardiomyopathy (Kuo, T.H. (1138) 343)

Satiety signal
Colipase; Fat digestion; Bile salt; Enterostatin; Procolipase; Activation peptide (Erlanson-Albertsson, C. (1125) 1)

Saturable kinetics
Acid secretion dynamics; Index of conservation; Mathematical model; Partially conservative agent; Transient response (Ličko, V. (1137) 19)

Saturated fatty acid
Serotonin receptor; Phospholipid; Transesterification; Microwave irradiation; (Sheep brain) (Banerjee, P. (1110) 65)

Scanning tunneling microscopy
DNA structure; Parallel stranded DNA (Zhu, J.-d. (1115) 239)

Inverted hexagonal phase of lipids; Lipid phase (Zeng, K. (1127) 157)

Scatter factor
Cell membrane protein; Affinity purification; Receptor; (MDCK cell) (Joseph, A. (1105) 141)

Cell motility; Glycosylation (Hofmann, R. (1120) 343)

Scavenger pathway
Lymphocyte; Macrophage; Atherosclerotic lesion (Kotake, H. (1138) 327)

Scavenger receptor
Liposome uptake; Anionic liposome (Lee, K.-D. (1111) 1)

Schistosomiasis
Proteoglycan; Heparan sulfate proteoglycan; Granuloma (Silva, L.-C.F. (1138) 133)

Proteoglycan; Heparan sulfate proteoglycan; Dermatan sulfate proteoglycan; Granuloma; Liver connective tissue (Silva, L.-C.F. (1139) 96)

Sclerotization
4-Methylcatechol; *N*-Acetyldopamine; Tyrosinase; (Insect cuticle); (Blowfly larvae) (Andersen, S.O. (1118) 134)

SCP_2
Leydig cell; Non-specific lipid transfer protein; Peroxisome (Van Haren, L. (1124) 288)

Scrapie-associated fibril-protein
Prion protein; HIV; Transactivation; Astrocyte; Encephalopathy (Müller, W.E.G. (1139) 32)

SDS-PAGE
Photoperoxidation; HDL; Apolipoprotein A-I; Apolipoprotein A-II; Immunoblot; Monoclonal antibody (Salmon, S. (1128) 167)

Sea anemone
Cytolysin; Tryptophan; Chemical modification (Turk, T. (1119) 1)

Cytolysin; Chemical modification; Biological activity (Turk, T. (1119) 5)

SecD
SecF; Protein secretion; Secretion machinery (Matsuyama, S.-i. (1122) 77)

SecF
SecD; Protein secretion; Secretion machinery (Matsuyama, S.-i. (1122) 77)

Secondary active transport
putP gene; Coupling cation; Proline carrier; Sodium ion/proline symport; (*E. coli*) (Hanada, K. (1105) 61)

Secondary and tertiary protein structure
Genomic copy number; Developmental mRNA expression; Codon usage; Protein structure; Inverted PCR; Intron (Rogers, P.V. (1129) 262)

Secondary structure
Band 3 protein; Detergent; Calorimetry; Protein folding (Sami, M. (1105) 148)

Circular dichroism; Conformational change; Protein kinase C (Shah, J. (1119) 19)

Protein structure; Phospholipid transfer protein; α-Helix; Disulfide bridge; (Wheat) (Désormeaux, A. (1121) 137)

High pressure; Temperature; Protein; Aggregation; Infrared spectroscopy; Denaturation (Ismail, A.A. (1121) 183)

Ribonuclease A; Folding kinetics; Folding intermediates; Tertiary structure (Lustig, B. (1121) 229)

Arrestin; FTIR; Phototransduction; S-antigen (Garcia-Quintana, D. (1122) 269)

Bacteriophage $\alpha 3$; Genome sequence; Evolution; Cryptic origin (Kodaira, K.-I. (1130) 277)

17–25S rRNA intergenic region; Thermophilic alga; (*C. caldarium*) (Elela, S.A. (1130) 339)

Second messenger
Calcium-binding protein; Protein–membrane interaction; Phosphatidylinositol cycle; PIP_2; Phospholipase C; Calcium (Xu, C. (1120) 49)

Ether lipid; Leukemia; Protein kinase; Tissue culture (Salari, H. (1134) 81)

Affective disorder; Lithium (Sillence, D.J. (1138) 46)

Secretion
Exocytosis; Membrane; Trichocyst; (*Paramecium*) (Glas-Albrecht, R. (1103) 1)

Salivary phospholipid; Adrenergic; Cholinergic mediation (Slomiany, B.L. (1124) 171)

GTP-binding protein; PC12 cell; Cell permeabilization; (Rat) (Yang, Y.C. (1134) 285)

Glycine; Glucose; Insulin; Cytoplasmic calcium; Oscillation (Tengholm, A. (1137) 243)

Secretion granule
Protein transport; Membrane permeability (Goncz, K.K. (1109) 7)

Secretion machinery
SecD; SecF; Protein secretion (Matsuyama, S.-i. (1122) 77)

Secretory granule
Amylase release; Membrane; Calcium ion; ATP, Mg^{2+}-; (Rat parotid gland) (Mizuno, M. (1116) 104)

Secretory product
HIV-infected monocytic cell; CD25 (IL-2-Rα) expression; PHA-activated human PBMC (Célérier, J. (1139) 300)

Secretory protein
Repeated peptide; Synthetic peptide; Peptide secondary structure (Wellman, S.E. (1121) 279)

***SecY* gene**
Ribosomal protein gene; *L15* gene; Evolution; (*H. marismortui*); (Archaebacteria) (Arndt, E. (1130) 113)

Sedimentation equilibrium
Spectrin; Dissociation; Self-association; Ionic strength; Ultracentrifuge (Cole, N. (1121) 23)

Seed protein
Repetitive sequence; Beta-turn; Beta-spiral; Supersecondary structure; Protein conformation (Halford, N.G. (1122) 118)

Selective excitation
NMR; Subtilisin Carlsberg; Proteinase; Autolysis; Spin echo (Consonni, R. (1119) 39)

Selectivity
Ionic channel; Conformational state; Barrier structure; Dipolar group; Rate-theory analysis; Conductance (Nieto-Frausto, J. (1111) 81)

Selenium
Thyroid hormone; Deiodination; Animal; Liver; Affinity-labeling; Bromoacetyl iodothyronine (Schoenmakers, C.H.H. (1121) 160)

Self assembly
Bipolar lipid; Monopolar-bipolar lipid vesicle; Ionic transport; Molecular packing parameter (Cavagnetto, F. (1106) 273)

Self-association
Doxorubicin; *N*-Hydroxysuccinimide ester; Transferrin; Albumin; Immunoglobulin (Demant, E.J.F. (1118) 83)

Equilibrium sedimentation; Despentapeptide insulin; (Kangaroo insulin); (Chicken insulin) (Jeffrey, P.D. (1119) 107)

Spectrin; Dissociation; Sedimentation equilibrium; Ionic strength; Ultracentrifuge (Cole, N. (1121) 23)

Seminal plasma
5′-Nucleotidase; FTIR; Protein secondary structure; Metalloprotein; Zinc (Fini, C. (1118) 187)

Spermatozoan; Arylsulfatase A and B; Sulfogalactosylceramide; Seminolipid (Gadella, B.M. (1128) 155)

Seminolipid
Spermatozoan; Seminal plasma; Arylsulfatase A and B; Sulfogalactosylceramide (Gadella, B.M. (1128) 155)

Semiquinone anion site
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Senescence
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Sequence comparison
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Sequence homology
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Bacterial outer membrane protein; OmpH; Nucleotide sequence; Human histocompatibility antigen B2701; Histocompatibility antigen; (*Yersinia pseudotuberculosis*) (Vuorio, R. (1129) 124)

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Serine proteinase
Gene cloning; Amino acid sequence; Substrate specificity; (*S. Aureus*) (Yoshikawa, K. (1121) 221)

Serine / threonine kinase
Activin receptor; Transmembrane protein; Evolutionary conservation; cDNA library (Matzuk, M.M. (1130) 105)

Serine / threonine messenger-independent protein kinase
Casein kinase; Mammary gland; Purification; Quercetin (Mitev, V.I. (1117) 90)

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D-Alanine; D-Proline; D-Isomer; HPLC (Nagata, Y. (1115) 208)

Serotonin
Pineal gland; Melatonin; *N*-Acetyltransferase activity; Pulsed static magnetic field (Richardson, B.A. (1137) 59)

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Serotonin receptor
Phospholipid; Saturated fatty acid; Transesterification; Microwave irradiation; (Sheep brain) (Banerjee, P. (1110) 65)

Serum
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Vitronectin; Collagen; Heparin; Glycosaminoglycan; Activation (Ishikawa, M. (1121) 173)

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Set point
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Sex-dependent expression
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Inositol phospholipid; Phosphoinositide; Phospholipase C; Plasma membrane; Polyphosphoinositide; (Wheat) (Melin, P.-M. (1123) 163)

Diacylglycerol kinase; Diacylglycerol; Inositol phospholipid; Phosphatidic acid; (*Triticum aestivum* L.); (Plant plasma membrane) (Lundberg, G.A. (1123) 177)

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Pepsinogen secretion; Potentiation; Adenylyl cyclase (Raufman, J.-P. (1135) 61)

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Myohemerythrin; Amino acid sequence; (*P. gouldii*) (Long, R.C. (1122) 136)

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Site-directed mutagenesis
Bicarbonate effect; Electron acceptor complex; Electron transfer; Photosynthesis; Quinone; Reaction center; (*Rb. sphaeroides*) (Wang, X. (1100) 1)

Cytochrome *bc*-complex; Ubiquinol:cytochrome c_2 oxidoreductase; (*Rb. sphaeroides*) (Crofts, A. (1101) 162)

Bacterial photosynthesis; Photosynthesis; Cytochrome bc_1-complex; Cytochrome *b*; Electrogenic step; Electrometry (Semenov, A.Y. (1101) 166)

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ADP; Phosphocreatine; Muscle function; (Guinea pig) (Clark, J.F. (1100) 137)

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ε(γ-Glutamyl)lysine crosslink; Connective tissue; Transglutaminase (Bowness, J.M. (1116) 324)

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Small intestine
Bile acid transport; Chemical modification; Photoaffinity labeling; Ileum; (Rabbit) (Kramer, W. (1111) 93)

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S1 mapping
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Tropomyosin; cDNA; Skeletal muscle (Hardy, S. (1131) 239)

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Glycolysis; Enzyme localization; (*T coli*) (Hardin, C.D. (1134) 256)

Smooth-muscle cell
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SMP30
Aging; Senescence; Protein; Two-dimensional electrophoresis; (Rat liver) (Fujita, T. (1116) 122)

Aging; Senescence; cDNA; (Rat liver) (Fujita, T. (1132) 297)

Snake venom
Dorsal root ganglion; Anionic channel; Whole-cell clamp; Phospholipase A_2; (*Oxyuranus scutellatus scutellatus*) (Possani, L.D. (1134) 210)

Sodium bioenergetics
ATP synthesis; Decarboxylation phosphorylation; Protonmotive force; $\Delta\tilde{\mu}_{H^+}$; $\Delta\tilde{\mu}^{+}_{Na}$ (Dimroth, P. (1101) 236)

Sodium butyrate
Alkaline phosphatase; Placenta; Luciferase; cyclic AMP; Transcription; JEG-3 cell (Povinelli, C.M. (1115) 243)

Sodium–calcium ion exchanger
Voltage sensitivity; Calcium ion channel; Intracytosolic calcium ion; Calcium ion, intracytosolic; Aging; Cerebrocortical nerve ending (Canzoniero, L.M.T. (1107) 175)

Sodium dependence
Cystine; Brush-border; Asymmetric transport; Electrogenic transport; (Kidney) (McNamara, P.D. (1103) 101)

Amino acid uptake; Caco-2; L-Proline; Carrier mediated transport; (Human intestine) (Nicklin, P.L. (1104) 283)

Sodium ion-calcium ion antiporter
Intracellular calcium; Plasma membrane vesicle; Calcium ion flux; (Hepatocyte) (Studer, R.K. (1134) 7)

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Current kinetics; Single-channel current; Channel density; Amiloride blocker-noise; (Crab-epithelium) (Zeiske, W. (1105) 245)

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Sodium ion cotransport
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Sodium ion dependence
Glucose transport; Brush-border membrane vesicle; High affinity ligand binding; (Mollusc gill) (Wright, S.H. (1103) 212)

Sodium ion efflux
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Microinjection; D-Inositol 1,4,5-trisphosphate; Ouabain-poisoned fiber; (Barnacle muscle fiber) (Bittar, E.E. (1106) 297)

Citrate; Aluminum; Barnacle fiber (Bittar, E.E. (1108) 210)

Sodium ion / glucose cotransporter
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Baculovirus; Expression; Sf9 cell (Smith, C.D. (1104) 151)

(Kidney); (*Xenopus* oocyte) (Pajor, A.M. (1106) 216)

Sodium ion occlusion
Oligomycin induced; Occlusion; ATPase, Na^+/K^+-; Detergent; (Pig kidney); (Shark rectal gland) (Esmann, M. (1106) 1)

Sodium ion / proline symport
putP gene; Coupling cation; Secondary active transport; Proline carrier; (*E. coli*) (Hanada, K. (1105) 61)

Sodium ion / proton antiport
ATPase, H^+-; Water transport; Sodium ion–proton exchange; Proteinase; Mercurial; Enzyme inhibition; (Rat) (Sabolić, I. (1103) 137)

Sodium ion / proton antiport system
Urine acidification; Amiloride; Cell proliferation; Intracellular pH regulation; pH regulation; Sodium ion transport (Viniegra, S. (1106) 99)

Sodium ion–proton change
Set point; Phosphorylation; Dephosphorylation; pH, intracellular; (Human blood platelet) (Livne, A.A. (1135) 13)

Sodium ion–proton exchange
ATPase, H^+-; Water transport; Proteinase; Mercurial; Enzyme inhibition; Sodium ion/proton antiport; (Rat) (Sabolić, I. (1103) 137)

Protein kinase C; Antiport; (Rat thyroid) (Törnquist, K. (1106) 221)

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Sodium ion–sodium ion exchange
ATPase, Na^+/K^+-; Cytoplasmic sodium activation; Cytoplasmic potassium inhibition; Potassium ion, cytoplasmic; Allosteric effect (Cornelius, F. (1108) 190)

Sodium ion symport
Reconstitution; Molecular size; Phosphate transport; Kidney; (Bovine) (Delisle, M.-C. (1104) 132)

Sodium ion transport
Sodium ion/proton antiport system; Urine acidification; Amiloride; Cell proliferation; Intracellular pH regulation; pH regulation (Viniegra, S. (1106) 99)

Vasopressin; Liver; Membrane vesicle; Phospholipase C; Protein kinase C (Piec, G. (1111) 27)

Sodium / potassium / chloride cotransport
Volume regulation; Actin; Microfilament; Cytochalasin B; (Ehrlich ascites tumor cell) (Jessen, F. (1110) 199)

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Sodium / potassium pump
Potassium ion–potassium ion exchange; Phosphatase, potassium dependent; ATPase, Na^+/K^+-; (Pig kidney) (Berberián, G. (1103) 85)

Sodium-proton exchange
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Sodium pump
Respiratory chain; NADH:quinone reductase; Two-electron reduction; One-electron reduction; (*V. alginolyticus*) (Hayashi, M. (1099) 145)

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Heart cell; Chick embryo; Intracellular calcium; Cardiac glycoside (Ahlemeyer, B. (1136) 91)

Ouabain; Intracellular sodium ion; ATPase, Na^+/K^+-; Digital imaging microscopy; (Chick-embryo heart cell) (Ahlemeyer, B. (1137) 135)

Sodium respiratory chain
Alkaline adaptation; NADH-quinone reductase, Na^+; Oxidase, Na^+; (*Bacillus FTU, E. coli*) (Avetisyan, A.V. (1098) 95)

α-Solanine
Glycoalkaloid; α-Chaconine; α-Tomatine; Sterol; LUV (Keukens, E.A.J. (1110) 127)

Soleus muscle
Pyruvate dehydrogenase kinase; cyclic AMP; Free fatty acid; (Rat) (Stace, P.B. (1135) 201)

Solid phase method
Glucose : ceramide glucosyltransferase; Enzyme assay (Matsuo, N. (1116) 97)

Solid protein
Water content; Deuterium; NMR (Tamura, A. (1119) 178)

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(−)-Δ^8-Tetrahydrocannabinol; (−)-*O*-Methyl-Δ^8-tetrahydrocannabinol; Dipalmitoylphosphatidylcholine; Drug–membrane interaction; DSC; X-ray diffraction; NMR, ^2H- (Yang, D.-P. (1103) 25)

Solubility
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Solubilization
Reconstitution; Leucine; Transport; (*L. lactis*) (In 't Veld, G. (1104) 250)

Prostaglandin receptor; Sarcolemma; Heart (Michalak, M. (1111) 247)

Acyl-CoA:1-acyl-glycerophosphocholine acyltransferase; Acyl specificity; Microsome; (Rat liver) (Mukherjee, J.J. (1123) 27)

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Radioenzymatic assay; NAD^+; Betaine aldehyde; Betaine (Zhang, J. (1117) 333)

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Transhydrogenase, H^+; Mitochondrion; Enzyme characterization (Cunningham, I.J. (1100) 332)

Solution complexation mechanism
Uncoupler; Fluazinam; Mitochondrion (Brandt, U. (1101) 41)

Somatostatin
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Somatotropin
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Somatotropin releasing hormone
Somatotropin; Potassium; Morphology; Perfusion; (Anterior pituitary gland); (Rat) (Engström, K.G. (1135) 318)

Sonication
Thylakoid; P-700; Cytochrome *f*; Aqueous two-phase partition; Membrane domain (Albertsson, P.-Å. (1098) 90)

Sorption-desorption experiments
Water diffusion; Oil diffusion; NMR; Rape seed (*Brassica napus* L.) (Fleischer, G. (1116) 305)

Soybean seedling
Acetaldehyde; Hydrogen peroxide; Hydroperoxy intermediate; Chemiluminescence; Emission spectrum (Watanabe, H. (1117) 107)

SP-A
Surfactant-associated protein; SP-B; SP-C; Proteinosis; Primary structure modification; Plasma desorption mass spectrometry (Voss, T. (1138) 261)

SP-B
Surfactant-associated protein; SP-A; SP-C; Proteinosis; Primary structure modification; Plasma desorption mass spectrometry (Voss, T. (1138) 261)

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Surfactant-associated protein; SP-A; SP-B; Proteinosis; Primary structure modification; Plasma desorption mass spectrometry (Voss, T. (1138) 261)

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Specific binding
Tryptophan oxygenase gene; Nucleotide sequence; Glucocorticoid receptor (Merkulov, V.M. (1132) 100)

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Calpain; Alveolar epithelial type II cell (Zimmerman, U.-J.P. (1137) 127)

Spectroscopy
Chlorophyll; Antenna; Photosynthesis (Hemelrijk, P.W. (1098) 159)

Pigment-protein complex; Light harvesting antenna; Reaction center; Energy transfer; Detergent solubilization; (*E. mobilis*); (*Rps. palustris*); (*Rb. sphaeroides*) (Leguijt, T. (1102) 177)

Electrophysiology; Calcium ion channel; Ion channel (Reid, D.G. (1106) 264)

Fibrinogen; Fragment (Azpiazu, I. (1119) 268)

Sperm maturation
Calcium ion transport; Lanthanum ion (Okamura, N. (1108) 110)

Sperm membrane
Acrosome reaction; Estradiol; Progesterone; Testosterone (Shivaji, S. (1108) 99)

Spermatogenesis
Cyclic nucleotide phosphodiesterase; Enzyme purification; Imidazolinone; Kinetics; (Mouse germ cell) (Giorgi, M. (1121) 178)

Spermatozoan
Seminal plasma; Arylsulfatase A and B; Sulfogalactosylceramide; Seminolipid (Gadella, B.M. (1128) 155)

Spermatozoon
Anion channel; Acrosome reaction; Bicarbonate transport; cyclic AMP (Spira, B. (1109) 65)

Tyrosine kinase; Non-radioactive activity detection (Berruti, G. (1118) 149)

Spermidine
Polyamine; Spermine; Putrescine; Polyamine transport; HTC cell; DH23b cell; α-Difluoromethylornithine; Polyamine feedback; Polyamine toxicity; Ornithine decarboxylase overproducer (Mitchell, J.L.A. (1136) 136)

Spermidine / spermine N^1-acetyltransferase
Stress; Ornithine decarboxylase; Posttranslational regulation; SAT mRNA; (Ehrlich ascites tumor cell) (Obayashi, M. (1131) 41)

Spermine
Mitochondrion; Bidirectional transport; Phosphate; (Rat liver) (Siliprandi, D. (1102) 62)

Polyamine; Brush-border membrane transport; (Rat intestine) (Kobayashi, M. (1105) 177)

Sarcoplasmic reticulum; Ryanodine receptor; Polyamine (Zarka, A. (1108) 13)

Polyamine; Spermidine; Putrescine; Polyamine transport; HTC cell; DH23b cell; α-Difluoromethylornithine; Polyamine feedback; Polyamine toxicity; Ornithine decarboxylase overproducer (Mitchell, J.L.A. (1136) 136)

Spherocytosis
Membrane fluidity; Pyrene excimer; Membrane asymmetry; Protein–lipid interaction (Celedon, G. (1104) 243)

Spheroid
Lipid metabolism; Choline; Ethanolamine; NMR, ^{31}P-; NMR, ^{13}C-; T47D; Proliferating; Quiescent (Ronen, S.M. (1138) 203)

Sphinganine
Type C Niemann-Pick; Cholesterol; Sphingosine; Sphinganine kinase (Goldin, E. (1127) 303)

Sphinganine kinase
Type C Niemann-Pick; Cholesterol; Sphingosine; Sphinganine (Goldin, E. (1127) 303)

Sphingoid base
Sphingosine; Phospholipase A_2; Phospholipase D; Inhibition; Substrate dilution (Franson, R.C. (1136) 169)

Sphingolipid
Sphingolipid activator protein; GM2-activator; Sulfatide activator; Glucosylceramidase activator; Saposin; Sphingolipidose; Lysosome (Fürst, W. (1126) 1)

Sphingolipid activator protein
GM2-activator; Sulfatide activator; Glucosylceramidase activator; Saposin; Sphingolipid; Sphingolipidose; Lysosome (Fürst, W. (1126) 1)

Sphingolipidose
Sphingolipid activator protein; GM2-activator; Sulfatide activator; Glucosylceramidase activator; Saposin; Sphingolipid; Lysosome (Fürst, W. (1126) 1)

Sphingomyelin
Plasma membrane; Lipid biosynthesis; (BHK cell) (Quinn, P. (1124) 95)

Ceramide; Retinoic acid; Sphingosine; (GH_4C_1 cell) (Kalén, A. (1125) 90)

Sphingomyelinase; ACAT; Brefeldin; Verapamil; Cholesterol transport; (Human skin fibroblast); ($CaCo_2$ cell); (Mouse macrophage); (Aortic smooth muscle cell) (Stein, O. (1126) 291)

Cholesterol transport; Phosphatidylcholine; (Human) (Reichl, D. (1127) 28)

Sphingomyelin synthesis
Fluorescent sulfatide; Fluorescent sphingolipid; Monensin; Oligodendrocyte; Sulfatide metabolism; (Rat glial cell) (Vos, J.P. (1126) 269)

Sphingomyelinase
Sphingomyelin; ACAT; Brefeldin; Verapamil; Cholesterol transport; (Human skin fibroblast); ($CaCo_2$ cell); (Mouse macrophage); (Aortic smooth muscle cell) (Stein, O. (1126) 291)

Niemann-Pick disease; Acyl-CoA : cholesterol acyltransferase; Human fibroblast (Byers, D.M. (1138) 20)

Sphingosine
4-Hydroxynonenal; Phospholipase D; Phospholipid hydrolysis (Kiss, Z. (1124) 300)

Ceramide; Retinoic acid; Sphingomyelin; (GH_4C_1 cell) (Kalén, A. (1125) 90)

Albumin; Amphiphilic amine; Fatty acid; Phosphatidate phosphohydrolase; (Rat hepatocyte) (Gomez-Muñoz, A. (1127) 49)

Type C Niemann-Pick; Cholesterol; Sphinganine; Sphinganine kinase (Goldin, E. (1127) 303)

Fibronectin; 12-*O*-tetradecanoylphorbol 13-acetate; Phorbol ester; Tumor promoter; Protein kinase C; Calphostin C; (Fibroblast) (Scheidl, H. (1135) 295)

Sphingoid base; Phospholipase A_2; Phospholipase D; Inhibition; Substrate dilution (Franson, R.C. (1136) 169)

Spinach
Ultraweak light emission; Emission spectrum; Lipid peroxidation; Mitochondrion (Hideg, È. (1098) 27)

Spinach thylakoid
Fluorescence quenching; Fluorescence emission; Chlorophyll spectral form; Light-harvesting chlorophyll *a*/*b* protein complex II (Jennings, R.C. (1101) 79)

Spinal cord
Peripheral nerve; Myelin; Phospholipid; Cerebroside; Fatty acid (Svennerholm, L. (1128) 1)

Spin echo
NMR; Subtilisin Carlsberg; Proteinase; Autolysis; Selective excitation (Consonni, R. (1119) 39)

Spin label
Interfacial ionization; Anesthetic; EPR (Miyazaki, J. (1103) 62)

EPR; pH sensitivity; Surface potential; Phospholipid bilayer; (Human serum albumin) (Khramtsov, V.V. (1104) 317)

Phosphatidylcholine; Membrane fluidity; Carotenoid (Subczynski, W.K. (1105) 97)

Hypotonic hemolysis; Aminophospholipid translocase; EPR; (Human erythrocyte) (Schrier, S.L. (1105) 170)

ATPase, Na^+/K^+-; EPR; Enzyme structure (Esmann, M. (1112) 215)

Endotoxin; Macrophage; Saccharide (Jackson, S.K. (1135) 165)

Malignant hypothermia; Erythrocyte; EPR; Order parameter; Rotational correlation time (Cooper, P. (1139) 70)

Spin-labelled glutathione
GSH transferase π; G-site; EPR; Glutathione (Caccuri, A.M. (1122) 265)

Spin-lattice relaxation
Photosystem II; EPR; Transient EPR signal; P680; Tyrosine-D; Manganese cluster (Kodera, Y. (1101) 23)

Spin resonance
Electrorotation; Cellular spin resonance; Electric property; Dielectric spectroscopy; (Yeast) (Hölzel, R. (1104) 195)

Spin state
EPR; $g = 4$ signal; Multifrequency; Oxygen-evolving complex; S_2-state (Haddy, A. (1099) 25)

Spin trap
LDL; Nitroxide; EPR (Kalyanaraman, B. (1126) 309)

Spin trapping
Hydroperoxide; Radical; EPR; Cytochrome *P*-450; Peroxyl; Alkoxyl (Greenley, T.L. (1116) 192)

Spirochete
Lyme disease; Outer surface protein; Protein structure; Circular dichroism; Fluorescence spectroscopy (France, L.L. (1120) 59)

Spirolactone
Mineralocorticoid; Receptor; Antibody; Immunohistochemistry; Photoaffinity; (Heart) (Mirshahi, M. (1120) 17)

Spleen
Amino acid sequence; Structure-activity relationship; Saposin-C; Activator protein; Glycoprotein (Sano, A. (1120) 75)

Poly(ethylene glycol); Phosphatidylethanolamine; Liposome; Drug delivery (Litzinger, D.C. (1127) 249)

Splice acceptor site
3-Ketothiolase deficiency; Point mutation; DNA sequence; PCR (Fukao, T. (1139) 184)

Splicing
Fibroblast growth factor; FGF; Receptor tyrosine kinase; Tyrosine kinase; FGF receptor; Alternative splicing (Jaye, M. (1135) 185)

Spontaneous diabetes
Insulin; Microsomal desaturase; Fatty acid; (Rat liver) (Mimouni, V. (1123) 296)

Insulin; γ-Linolenic acid; Microsomal chain elongation; (Liver); (BB rat) (Mimouni, V. (1133) 187)

Spontaneously hypertensive rat
Adenylyl cyclase; G-protein; (Rat vascular smooth-muscle cell) (Clark, C.J. (1136) 290)

Sporulation specific gene
(*Bacillus*) (Hudspeth, D.S.S. (1130) 229)

S-100 protein
Time-resolved fluorescence; Tyrosine fluorescence; Tyrosinate fluorescence (Turner, R.J. (1117) 265)

Sputum
Calgranulin A; Calgranulin B; Cystic fibrosis antigen; Granulocyte; TR146 cell line; (Cystic fibrosis); (Chronic obstructive pulmonary disease); (Chronic myeloid leukemia) (Longbottom, D. (1120) 215)

Squalene synthase
Cholesterol biosynthesis; HMG-CoA reductase; Peroxisome; U18666A; (Human) (Cohen, L.H. (1126) 114)

Squeeze-out
Surfactant-associated protein; Phospholipid; Liposome; Monolayer; Bilayer; Adsorption; Surface tension; Surface pressure; Respiratory distress syndrome; Calcium (Yu, S.-H. (1126) 26)

SSPE virus
Measles virus; Phosphoprotein gene; mRNA editing (Komase, K. (1129) 342)

S_2-state
EPR; $g = 4$ signal; Multifrequency; Oxygen-evolving complex; Spin state (Haddy, A. (1099) 25)

S_1-subsite
Dipeptidyl peptidase IV; Growth hormone-releasing factor; Substrate kinetics; Substrate specificity (Bongers, J. (1122) 147)

Stability
Liposome; Phosphatidylcholine, hydrogenated; Drug carrier; Plasma; Alternative complement pathway; Opsonin; iC3b; (Rat) (Funato, K. (1103) 198)

Dextran; Conjugation; Horseradish peroxidase; Liposome (Mumtaz, S. (1117) 174)

Pyrophosphatase; Denaturation; Thermophile; Archaebacterium; (*S. acidocaldarius*) (Wakagi, T. (1120) 289)

Stabilization mechanism
Prostacyclin; HDL; HSA; Apo A-I (Tsai, A.-l. (1115) 131)

Stable transfection
α_2-Adrenoceptor subtype; Cell line; [^{3}H]Rauwolscine binding; Adenylate cyclase activity; RNAase protection assay (Marjamäki, A. (1134) 169)

Staphylokinase
Plasminogen; α_2-Antiplasmin; Fibrin (Lijnen, H.R. (1118) 144)

Starvation
PDH kinase; Re-feeding (Jones, B.S. (1134) 164)

State transition
Photosynthesis; Optoacoustic; Photoacoustic; Energy storage; (Cyanobacterium) (Bruce, D. (1100) 242)

Static magnetic field
Cell growth; Cell morphology; DNA synthesis; HeLa cell; Normal human gingival fibroblast (Sato, K. (1136) 231)

Statistical model
Ubiquinol : cytochrome c_2 oxidoreductase; Mitochondrion (Nieboer, P. (1101) 90)

Staurosporine
Sodium ion–proton exchange; Vasopressin; Genistein; Tyrosine phosphorylation; Phorbol ester; Protein kinase C; Blood platelet; (Human) (Aharonovits, O. (1112) 181)

Neutrophil; Inositol 1,4,5-trisphosphate; Diacylglycerol; Intracellular calcium; (Human) (Nigam, S. (1135) 301)

Steady-state approximation
End-product inhibition; Metabolic oscillation; High enzyme concentration; Ribulose 1,5-bisphosphate carboxylase (Ryde-Pettersson, U. (1119) 118)

Steady state fluorescence
Reaction center; Photosystem II; Light induced degradation (Maciy, K. (1102) 76)

Membrane fluidity; Icosatetraynoic acid; Arachidonic acid; Molecular modeling; DNA synthesis inhibition; Electron microscopy (Brown, M. (1105) 285)

Steady-state kinetics
Glutamate dehydrogenase; Kinetic mechanism; Substrate specificity (Syed, S.E.-H. (1115) 123)

L-Tryptophan 2,3-dioxygenase; Infrared spectroscopy; Hemoprotein; Inhibitor binding (Uchida, K. (1121) 153)

Stealth liposome
Polymer grafting; Lipid bilayer; Poly(ethylene glycol); X-ray diffraction; Steric stabilization; Membrane mechanical properties (Needham, D. (1108) 40)

Stearidonic acid
α-Linolenic acid; Fatty acid, $n-3$; Plasma lipid; Fatty acid composition; Δ^6-Desaturase; (Rat liver) (Yamazaki, K. (1123) 18)

1-Stearoyl-2-caprylphosphatidylcholine
Raman spectroscopy; Phospholipid binary mixture; Eutectic phase behavior; Dimyristoylphosphatidylcholine; Mixed interdigitated bilayer (Slater, J.L. (1106) 242)

Steric stabilization
Stealth liposome; Polymer grafting; Lipid bilayer; Poly(ethylene glycol); X-ray diffraction; Membrane mechanical properties (Needham, D. (1108) 40)

Steroidogenesis
Ovarian microsome; Cytochrome $P\text{-}450_{17\alpha,\text{lyase}}$; Androstenedione; Successive reaction (Yamazaki, T. (1125) 335)

Androgen synthesis; Primary cell culture; Bovine adrenal; Cytochrome $P\text{-}450_{17\alpha,\text{lyase}}$ (Yamazaki, T. (1134) 143)

Steroid / thyroid receptor superfamily
COUP transcription factor; (*Xenopus laevis*) (Matharu, P.J. (1129) 331)

Sterol
Gramicidin; Channel inactivation; Red blood cell membrane; Lipid bilayer (Schagina, L.V. (1109) 91)

Glycoalkaloid; α-Solanine; α-Chaconine; α-Tomatine; LUV (Keukens, E.A.J. (1110) 127)

Trafficking; Yeast; Mutant (Keesler, G.A. (1123) 127)

Sterol oxidation
Cholesterol oxidase; Cholesterol; 5-Androsten-3β-ol; Lipid interaction (Slotte, J.P. (1124) 23)

Sterol synthesis
Plant sterol; Cytochrome *P*-450; Inhibitor; (Sterol 14-demethylase) (Rahier, A. (1125) 215)

Stimulation
trans-5-Prostaglandin E_2; Plasminogen; Tissue-type plasminogen activator; Fibrinolysis (Shimokawa, M. (1137) 317)

Stoichiometry
ATPase, Na^+/K^+-; Isoenzyme; Heterogeneity; Ouabain binding; ADP binding; (Pig kidney) (Jensen, J. (1110) 81)

Stop codon
Polymerase activity; Levansucrase; (*B. subtilis*) (Chambert, R. (1132) 145)

Stopped flow
Erythrocyte membrane; Anion transport; *p*-Chloromercuribenzene sulfonate (Zhang, Z.-h. (1106) 31)

Stopped-flow measurement
Polynucleotide; Base pairs opening kinetics; Hydrogen exchange (Girardet, J.-L. (1130) 127)

Storage disease
Batten disease; Protein methylation; ϵ-*N*-Trimethyllysine; Lysosome (Katz, M.L. (1138) 97)

Strain-dependent expression
Serum amyloid P-component (SAP); Acute phase reactant; Liver specific expression (Itoh, Y. (1131) 261)

Stratum corneum
FTIR; Membrane structure; Phospholipid vesicle; Lipid bilayer (Krill, S.L. (1112) 273)

FTIR; Membrane structure; Gel phase packing; Lipid fluidity; Phase transition (Krill, S.L. (1112) 281)

Stress
Spermidine/spermine N^1-acetyltransferase; Ornithine decarboxylase; Posttranslational regulation; SAT mRNA; (Ehrlich ascites tumor cell) (Obayashi, M. (1131) 41)

Stretch-activated channel
Patch clamp; Substate; Bacterium; (*B. subtilis*) (Szabó, I. (1112) 29)

Stroke
Cocaine; NMR, ^{31}P-; Magnesium ion; Ischemia; (Rat brain) (Altura, B.M. (1111) 271)

Stroma
Plastoquinone; Electron transfer chain; Photosystem II; Plastocyanin; Restricted diffusion; Grana (Joliot, P. (1101) 1)

Structural analysis
Myoepithelial cell; Proteoglycan; Immunofluorescence; Immunolocalization; (mammary gland) (Warburton, M.J. (1117) 291)

Structural elucidation
Bacterial glycolipid; Hexosyl acylglycerol; Glycolipid; NMR, one-dimensional; NMR, two-dimensional; (*C. fuscus*) (Scherer, O.W. (1117) 42)

Structural fluctuation
Hemoglobin crystal; Methemoglobin-thiocyanate; Temperature jump; Polarized absorption spectroscopy (Steinhoff, H.-J. (1121) 269)

Structural gene sequence
Flavodoxin; Amino acid sequence; Sequence comparison; FMN binding site; (*D. gigas* ATCC 19364 and ATCC 29494) (Helms, L.R. (1131) 325)

Structural organization
Bacteriophage; Baseplate; Recognition; Infection process; DNA ejection; Electron microscopy; Image processing (Khusainov, A.A. (1117) 237)

Structure–activity relationship
α-Chymotrypsin; Substrate specificity (Clapés, P. (1118) 70)

Amino acid sequence; Spleen; Saposin-C; Activator protein; Glycoprotein (Sano, A. (1120) 75)

Purine nucleoside phosphorylase; Substrate/inhibitor property; Formycin A; Formycin B; Tautomeric form; Ionic form; (*E. coli*) (Bzowska, A. (1120) 239)

Structure–function relationship
Photosynthesis; Membrane protein; FTIR spectroscopy (Gerwert, K. (1101) 147)

Photosynthesis; Reaction center; Electron transfer (Moser, C.C. (1101) 171)

Calcium pump; Plasma membrane (Carafoli, E. (1101) 266)

Structure homology
Prostaglandin 9-oxoreductase; Androgen metabolism: Species comparison; (Rat) (Inazu, N. (1116) 50)

Subcellular fraction
Glioma; Plasmalogen; Fatty acid, $(n-3)$ and $(n-6)$; Polyunsaturated fatty acid; Phospholipid; Plasma membrane; Microsome; Percoll extraction (Thomas, S.E. (1126) 125)

Subcellular localization
Phospholipase A_2; Phospholipase C; Adrenal medulla; Cytosolic fraction; Lysosomal (Petit, K. (1125) 150)

Subcellular location
γ-Tocopherol methyltransferase; Tocopherol biosynthesis; (*E. gracilis*) (Shigeoka, S. (1128) 220)

Subcellular membrane
Surfactant protein C; Phospholipid; Palmitic acid (Vorbroker, D.K. (1105) 161)

Subcutaneous
Lipoprotein lipase; Glycosylation; Adipose tissue; Omental; (Human) (Sakayama, K. (1127) 153)

Subcutaneous fat
Acyl-CoA synthetase; Lipoprotein lipase; mRNA; Mesenteric fat; (Zucker fatty rat) (Shimomura, I. (1124) 112)

Subfractionation
Chlorophyll protein; Light-cold stress; Photoinhibition; Protein phosphorylation; Thylakoid membrane fluidity (Carlberg, I. (1099) 111)

Subgel phase
Dipalmitoylphosphatidylglycerol; Poly(L-lysine); X-ray diffraction; DSC; Freeze-fracture; Phase transition (Takahashi, H. (1110) 29)

Subsite specificity
Papain; Acyl transfer (Schuster, M. (1121) 207)

Substance P
Phosphatidylserine; NMR, ^{1}H-; Lipid bilayer (Duplaa, H. (1107) 12)

Aminoacylproline hydrolase; Aminopeptidase P; Bradykinin; First-order enzyme kinetics; (Antiarrhythmic peptide); (Guinea pig) (Ryan, J.W. (1119) 140)

Tachykinin; Bovine articular chondrocyte; Proteoglycan (Halliday, D.A. (1137) 29)

Substance P receptor
G-protein-coupled receptor; Guinea-pig uterus; COS cell expression (Gorbulev, V. (1131) 99)

Substantia nigra
Melanin; Neuromelanin; Parkinson disease; (Human brain) (Zecca, L. (1138) 6)

Substate
Stretch-activated channel; Patch clamp; Bacterium; (*B. subtilis*) (Szabó, I. (1112) 29)

Substrate
ATPase, Na^+/K^+-; Magnesium ion; ATP; Pre-steady-state kinetics; Phosphorylation; (Pig kidney) (Campos, M. (1105) 51)

Substrate activity
Adenylosuccinate lyase; AMP deaminase; 2′,3′-Dideoxynucleotide (Nair, V. (1119) 201)

Substrate analog
Aldolase; Phosphoric ester; Active site; Binding constant (Ogata, H. (1119) 123)

Substrate-assisted catalysis
Chemotaxis; Methylesterase; Di-isopropylfluorophosphate; Active-site serine (Krueger, J.K. (1119) 322)

Substrate dilution
Sphingosine; Sphingoid base; Phospholipase A_2; Phospholipase D; Inhibition (Franson, R.C. (1136) 169)

Substrate inactivation
Enzyme purification; Molybdoenzyme; Xanthine dehydrogenase; (Chlamydomonas) (Pérez-Vicente, R. (1117) 159)

Substrate / inhibitor property
Purine nucleoside phosphorylase; Formycin A; Formycin B; Structure-activity relationship; Tautomeric form; Ionic form; (*E. coli*) (Bzowska, A. (1120) 239)

Substrate kinetics
Dipeptidyl peptidase IV; Growth hormone-releasing factor; Substrate specificity; S_1-subsite (Bongers, J. (1122) 147)

Substrate phosphorylation
Protein kinase; cyclic GMP; Enzyme structure; Enzyme regulation (Hofmann, F. (1135) 51)

Substrate specificity
Phospholipase D; Liver; Cell membrane; Phosphatidylinositol (Heller, M. (1109) 109)

Glutamate dehydrogenase; Kinetic mechanism; Steady-state kinetics (Syed, S.E.-H. (1115) 123)

Anesthesia theory; α-Chymotrypsin; Kinetics; Activation (Seto, T. (1116) 204)

Structure–activity relationship; α-Chymotrypsin (Clapés, P. (1118) 70)

Pepstatin-insensitive; Carboxyl proteinase; Acid proteinase; Kinetic property; (*Pseudomonas*) (Oda, K. (1120) 208)

Enzyme purification; β-Glucosidase; Purification; Kinetic constant; (*T. reesei*) (Chen, H. (1121) 54)

Gene cloning; Amino acid sequence; Serine proteinase; (*S. Aureus*) (Yoshikawa, K. (1121) 221)

Dipeptidyl peptidase IV; Growth hormone-releasing factor; Substrate kinetics; S_1-subsite (Bongers, J. (1122) 147)

Lipase A; Lipase B; Lipase structure; (*G. candidum*) (Charton, E. (1123) 59)

Subtilisin
Psychrotrophic bacterium; DNA sequence; Cold adaptation (Narinx, E. (1131) 111)

Subtilisin Carlsberg
NMR; Proteinase; Autolysis; Selective excitation; Spin echo (Consonni, R. (1119) 39)

Subtilisin digestion
Proteolysis; Raw-starch-digesting amylase; Amylase; Hydrolytic domain; Peptide; Active site; (*B. circulans* F-2) (Kim, C.-H. (1122) 243)

Subtractive hybridization
cDNA cloning; Natural killer cell; T cell; Golgi apparatus (Liu, L. (1132) 75)

α subunit
Casein kinase 2; cDNA sequence; (Maize) (Dobrowolska, G. (1129) 139)

β1 subunit
ATPase, Na^+/K^+-; 5′ Flanking sequence; (Rat) (Liu, B. (1130) 336)

Subunit *c*
ATP synthase, F_1F_0-; Proton translocation; Energy transduction (Fillingame, R.H. (1101) 240)

Subunit IV
Cytochrome *c* oxidase; Enzyme isoform; Polymorphism (Van Kuilenburg, A.B.P. (1119) 218)

Subunit V
Cytochrome *c* oxidase; cDNA; Nucleotide sequence; Evolution; Mitochondrion; (*Dictyostelium discoideum*) (Rizzuto, R. (1129) 100)

Subunit VIII
Cytochrome *c* oxidase, cDNA; (Rat heart) (Scheja, K. (1132) 91)

Successive reaction
Steroidogenesis; Ovarian microsome; Cytochrome $P\text{-}450_{17\alpha,\text{lyase}}$; Androstenedione (Yamazaki, T. (1125) 335)

Succinylation
Nucleosomal core; Histone amino group; Transcription; (Chicken erythrocyte) (Piñeiro, M. (1129) 183)

Sucrose carrier
Sucrose transport; Plant plasmalemma; Plant plasma membrane; Reconstitution; (Sugar beet) (Li, Z.-S. (1103) 259)

Sulfur dioxide; Sulfite; Sucrose transport; Plant plasma membrane; (Sugar beet) (Maurousset, L. (1105) 230)

Sucrose gradient centrifugation
TYMV RNA; RNA degradation; RNA deaggregation; Light scattering (Sam, T. (1129) 64)

Sucrose transport
Sucrose carrier; Plant plasmalemma; Plant plasma membrane; Reconstitution; (Sugar beet) (Li, Z.-S. (1103) 259)

Sulfur dioxide; Sulfite; Sucrose carrier; Plant plasma membrane; (Sugar beet) (Maurousset, L. (1105) 230)

Sugar transport
Cell culture; Insulin; Cytochalasin B; Phloretin; Phlorizin; (LLC-PK_1 cell) (Miller, J.H. (1110) 209)

Suicidal enzyme kinetics
Remaining enzyme activity; Partition ratio; Enzyme inactivation (Funaki, T. (1118) 21)

Suicide inactivation
Heme d_1; Thiomethyl; (Mass spectrometry) (Timkovich, R. (1116) 24)

Sulfatide
Calcitonin; Lipid–peptide interaction; Right-angle light scattering; Carboxyfluorescein leakage; Excimer/monomer ratio (Viani, P. (1106) 77)

Ganglioside; Glycosphingolipid; Membrane fusion; Myelin basic protein; Melittin (Maggio, B. (1112) 105)

Blood-brain barrier; Liposome; Mannopyranoside; Cationized bovine serum albumin (Micklus, M.J. (1124) 7)

Sulfatide activator
Sphingolipid activator protein; GM2-activator; Glucosylceramidase activator; Saposin; Sphingolipid; Sphingolipidose; Lysosome (Fürst, W. (1126) 1)

Sulfatide metabolism
Fluorescent sphingolipid; Fluorescent sulfatide; Lissamine rhodamine; (Human skin fibroblast) (Monti, E. (1124) 80)

Fluorescent sulfatide; Fluorescent sphingolipid; Monensin; Oligodendrocyte; Sphingomyelin synthesis; (Rat glial cell) (Vos, J.P. (1126) 269)

Sulfhydryl group
Biotin; Carrier transport; Histidine residue; Brush-border membrane; (Rabbit) (Said, H.M. (1107) 238)

Sulfhydryl reagent
Voltage clamp; Inactivation kinetics (Alekseev, S.I. (1110) 178)

Thimerosal; Free cytosolic calcium ion; Calcium ion, cytosolic; Membrane potential; Arachidonic acid; (Rat thymocyte) (Gukovskaya, A.S. (1111) 65)

Sulfite
Sulfur dioxide; Sucrose carrier; Sucrose transport; Plant plasma membrane; (Sugar beet) (Maurousset, L. (1105) 230)

Sulfogalactosylceramide
Spermatozoan; Seminal plasma; Arylsulfatase A and B; Seminolipid (Gadella, B.M. (1128) 155)

Sulfonium dication
Phospholipase C; (*C. perfringens*) (Young, P.R. (1121) 297)

Sulfotransferase
Androsterone; Development; Isoenzyme; Isoelectric variant; (Rat liver) (Homma, H. (1121) 69)

Sulfotransferase secretion
Chondroitin 6-sulfotransferase; Chondroitin 4-sulfotransferase; Monensin; (Chick chondrocyte) (Habuchi, O. (1133) 9)

Sulfur dioxide
Sulfite; Sucrose carrier; Sucrose transport; Plant plasma membrane; (Sugar beet) (Maurousset, L. (1105) 230)

Sulfur imino acid
Pantetheine; *S*-Aminoethyl-L-cysteine; Ketimine; Cystathionine-β-synthase; Pantetheinase (Pitari, G. (1116) 27)

Sulfation
Heparan sulphate proteoglycan; Glomerular basement membrane; (Rat glomerulus) (Castillo, G.M. (1136) 119)

Sulfonylurea
ATP-sensitive K-channel; Diazoxide; β-cell; Protein phosphorylation (Niki, I. (1133) 95)

Supercoiled DNA
DNA structure; Helix opening; Cruciform; Extrusion mechanism (Murchie, A.I.H. (1131) 1)

Supercomplex
Electron transfer; Plastoquinone; Cytochrome *b/f*; Q-cycle; Restricted diffusion (Joliot, P. (1102) 53)

Superoxide
Vitamin E; Vitamin C; Liposome; Chemiluminescence (Gotoh, N. (1115) 201)

Xanthine oxidase; Uric acid; Xanthine; Free radical; Kinetics (Radi, R. (1122) 178)

Peroxidation; Malondialdehyde; Paraquat; EPR (Tomita, M. (1128) 174)

Red blood cell; Thalassemia; Primaquine; Oxidative stress (Grinberg, L.N. (1139) 248)

Superoxide dismutase
Peroxisome (Wanders, R.J.A. (1115) 259)

Catalase; Glutathione peroxidase; Dipalmitoylphosphatidylcholine; Fetal development; (Human) (McElroy, M.C. (1117) 153)

Lipid peroxidation; Copper; Oxidative stress; (Rat erythrocyte) (Bartoli, G.M. (1123) 291)

LDL; Lipid peroxidation; Albumin; Atherosclerosis; Antioxidant (Thomas, C.E. (1128) 50)

Supersecondary structure
Seed protein; Repetitive sequence; Beta-turn; Beta-spiral; Protein conformation (Halford, N.G. (1122) 118)

Supramolecular enzyme organization
Lysosomal glycosidase; G_{M1}-galactosidase; Neuraminidase; Multienzyme complex; Micellar enzymology (Pshezhetsky, A.V. (1122) 154)

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Threonine dehydratase
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Monoclonal antibody; Immunoaffinity chromatography (Bos, R. (1117) 188)

trans-5-Prostaglandin E_2; Plasminogen; Fibrinolysis; Stimulation (Shimokawa, M. (1137) 317)

T-kininogen
Acute phase protein; Inflammation; Monoclonal antibody; Thyroidectomy; (Rat) (Bouhnik, J. (1122) 70)

TLC
Oxysterol; Sickle cell disease; Erythrocyte membrane; GC-MS; FTIR (Kucuk, O. (1103) 296)

T-lymphoblastoid cell
Magnetic field; Transcription; 60 Hz; c-*fos*; c-*myc*; c-*jun*; Protein kinase C (Phillips, J.L. (1132) 140)

T lymphocyte
Gene regulation; Proteinase; Cytotoxicity (Prendergast, J.A. (1131) 192)

1,25-Dihydroxyvitamin D-3; Calcium ionophore; Phorbol ester (Zilberman, Y. (1134) 297)

dTMP kinase
Cell cycle; *cdc8*; (Yeast) (Abaigar, L.T. (1132) 222)

TnC
NMR, ^{1}H-; TnI; Mastoparan; Calcium ion binding; (Wasp venom) (Tsuda, S. (1121) 213)

TnI
NMR, ^{1}H-; TnC; Mastoparan; Calcium ion binding; (Wasp venom) (Tsuda, S. (1121) 213)

Tobacco hornworm
Vacuolar ATPase; Plasma membrane; cDNA sequence; Lepidoptera; Insect; Larva (Novak, F.J.S. (1132) 67)

Tocopherol biosynthesis
γ-Tocopherol methyltransferase; Subcellular location; (*E. gracilis*) (Shigeoka, S. (1128) 220)

α-Tocopherol
Polyunsaturated fatty acid; Fatty acid; Ethanol; Phospholipid bilayer; Membrane (Stillwell, W. (1105) 237)

Reduced coenzyme Q homolog; Antioxidant; Free radical; (Rat hepatocyte) (Matsura, T. (1127) 277)

α-Tocopherol quinone
Monolayer; Plastoquinone; Monogalactosyldiacylglycerol; Charge-transfer complex (Kruk, J. (1112) 19)

γ-Tocopherol methyltransferase
Subcellular location; Tocopherol biosynthesis; (*E. gracilis*) (Shigeoka, S. (1128) 220)

Toll receptor
Dorso-ventral polarity; Easter proteinase; Proclotting enzyme; (*Drosophila*) (Gay, N.J. (1132) 290)

Toluidine blue
Potassium ion; Cell size; Vacuole; Photodynamic treatment; Yeast; (*K. marxianus*) (Paardekooper, M. (1108) 86)

α-Tomatine
Glycoalkaloid; α-Solanine; α-Chaconine; Sterol; LUV (Keukens, E.A.J. (1110) 127)

Tonin
Prostate; Kallikrein; Kininogenase (Wang, C. (1121) 309)

Tonoplast
Anion transport; Ion channel; Lipid bilayer; Reconstitution; Vacuole (Klughammer, B. (1104) 308)

ATPase; ATPase, H^+-; Liposome; Proton pump; Reconstitution; Vacuole; (*Kalanchoë*) (Warren, M. (1106) 117)

H^+-ATPase; Detergent solubilisation; Electron microscopy; HPLC; (*B. Vulgaris*) (Ellis, C.M. (1136) 319)

Topical application
Lipid vesicle; Drug carrier; Hydration force; Osmotic gradient; Dermal transport (Cevc, G. (1104) 227)

Topography
ATPase, H^+/K^+-; Gastric secretion; Antibody; Synthetic peptide; Membrane protein (Smolka, A. (1108) 75)

Topoisomerase
Helical unwinding; DNA minor groove; Hoechst 33258 (Beerman, T.A. (1131) 53)

Topoisomerase II
Growth; Cytoplasmic factor; (Mouse) (Collett, A.G. (1132) 259)

Topoisomerase isoform
Gene expression; Normal tissue; Differentiation; Development; (Mouse) (Capranico, G. (1132) 43)

Topology
ATPase, H^+/K^+; cDNA cloning; Antibody (Bamberg, K. (1131) 69)

Total internal reflection
Phospholipid bilayer, supported; Langmuir-Blodgett film; Membrane fusion; Fluorescence microscopy; FRAP (Kalb, E. (1103) 307)

Total iron binding capacity
Transgenic mice; Transferrin; Albumin; Serum amyloid protein; C3; Aging; Acute phase reaction (Adrian, G.S. (1132) 168)

Toxicology
Immunochemistry; Protein characterization; Cytochrome *P*-450; (Human fetal liver) (Kitada, M. (1117) 301)

Toxin
Colicin A; Channel activity; Translocation, envelope; Membrane protein (Letellier, L. (1101) 218)

Membrane hyperpolarization; ATP; Bisoxonol; (Madin-Darby canine kidney cell) (Tauc, M. (1105) 155)

Antibody; Anti-idiotypic antibody; Curaremimetic toxin; Myasthenia gravis (Pillet, L. (1138) 282)

Toxin binding
Tetanus toxin; Catecholamine release, inhibition of; (Bovine adrenal chromaffin cell) (Colville, C.A. (1137) 264)

α-Toxin
Alpha-toxin; Multilamellar liposome; Membrane channel; Fatty acyl domain; Phospholipid; (*S. aureus*) (Tomita, T. (1104) 325)

α-Toxin monomer
Pore formation; Calcium ion; Liposome; (*S. aureus*) (Tokunaga, H. (1105) 125)

δ-Toxin
Phosphatidylcholine; NMR, ^{2}H-; NMR, ^{31}P-; Protein–lipid interaction (Rydall, J.R. (1111) 211)

θ-Toxin (perfringolysin O)
Cholesterol topology; Liposome; High-affinity toxin-binding site; Cholesterol/phospholipid ratio; (*C. perfringens*) (Ohno-Iwashita, Y. (1109) 81)

T7 polymerase / promoter system
DNA sequencing; *hydG* gene; *hydH* gene (Chopra, A.K. (1129) 115)

Trachea
Thromboxane A_2; Prostaglandin H_2; Histamine H_1; Receptor; Smooth-muscle cell; (Guinea pig) (Miki, I. (1137) 107)

Trafficking
Sterol; Yeast; Mutant (Keesler, G.A. (1123) 127)

***Trans*-acting factor**
Metallothionein; Copper; Gene expression (Yamada, T. (1131) 188)

Transactivation
Baculovirus; BmNPVIEG; Nuclear polyhediosis virus (Huybrechts, R. (1129) 328)

Prion protein; Scrapie-associated fibril-protein; HIV; Astrocyte; Encephalopathy (Müller, W.E.G. (1139) 32)

Transbilayer incorporation
Pyrene; Fluorescence; Blood platelet; Binding; Platelet activation; (Bovine blood) (Kitagawa, S. (1107) 231)

Transcription
Alkaline phosphatase; Placenta; Luciferase; cyclic AMP; Sodium butyrate; JEG-3 cell (Povinelli, C.M. (1115) 243)

Succinylation; Nucleosomal core; Histone amino group; (Chicken erythrocyte) (Piñeiro, M. (1129) 183)

DNA methylation; Gene expression; Promoter; *dam* gene; (*E. coli*) (Wu, T.-H. (1131) 47)

hsp82 gene; Fungal morphogenesis (Minchiotti, G. (1131) 103)

*GAL*10 promoter; Heterologous gene expression; Lysine-rich histone; Upstream activation sequence; (*S. cerevisiae*) (Shwed, P.S. (1131) 152)

Magnetic field; 60 Hz; T-lymphoblastoid cell; c-*fos*; c-*myc*; c-*jun*; Protein kinase C (Phillips, J.L. (1132) 140)

Epidermal growth factor; Protein kinase C; Proto-oncogene induction; *fos*; *jun* (Franklin, C.C. (1134) 137)

Insulin; Albumin; Gene expression; Phorbol ester; (Rat hepatoma cell) (Messina, J.L. (1137) 225)

Cytochrome *c* oxidase; Myoblast differentiation; Mitochondrial myopathy; (Human) (Taanman, J.-W. (1139) 155)

Transcriptional control
Z-DNA; Preproenkephalin gene; (Rat) (Durkin, R.C. (1131) 349)

Transcriptional factor
Mitochondrion; Genomic gene; Upstream region; (Human) (Tominaga, K. (1131) 217)

Transcriptional regulation
Ornithine decarboxylase; Induction; Amino acid; Translational regulation; (Rat intestine) (Miyamoto, K.-i. (1129) 195)

Nucleic acid sequence; Gene promoter; CAT assay; Proliferating Cell Nuclear Antigen (PCNA); (Rat) (Ohashi, Y. (1130) 175)

Liver-specificity; DNA binding protein (De Simone, V. (1132) 119)

Cuticle protein; Gene cloning; Genomic sequence; Molting hormone; (*B. mori*) (Nakato, H. (1132) 161)

Transcriptional start site
L7a ribosomal protein; Genome organization; DNA sequence; (Human) (Colombo, P. (1129) 93)

Transcriptional terminator
atp operon; Posttranscriptional control; mRNA structure; mRNA stability; Endoribonuclease; Exoribonuclease; (*E. coli*) (Ziemke, P. (1130) 297)

Transcription control
In vitro transcription; Laminin B1 gene; Promoter; (Mouse) (Okano, R. (1132) 49)

Transcription factor
C/EBP; Gene expression; Hyperlipidemia; Hypolipidemic drug (Staels, B. (1123) 227)

TATA-box; Myelin basic protein; Core promoter; (Mouse) (Tamura, T.-a. (1129) 83)

Differentiation; Fos; Jun; Glucocorticoid receptor (Ponta, H. (1129) 255)

Hepatocyte nuclear factor 4; Differential splicing; Polymerase chain reaction (Hata, S. (1131) 211)

Atherosclerosis; Lipoprotein; Gene expression; Lipoprotein lipase; α-Fetoprotein; (Rat liver) (Peinado-Onsurbe, J. (1131) 281)

Transcription regulation
EBV-vector; *lac* operon; (Human cell) (Biard, D.S.F. (1130) 68)

Transcription signal
Gene family; Minor small nuclear ribonucleoprotein particle; RNA 3′ processing; (*Xenopus laevis*) (Phillips, S.C. (1131) 95)

Transducin
Visual transduction; Retina; Rhodopsin (Chabre, M. (1101) 260)

Transesterification
Serotonin receptor; Phospholipid; Saturated fatty acid; Microwave irradiation; (Sheep brain) (Banerjee, P. (1110) 65)

Lithocholic acid; Acyl glucuronide (Panfil, I. (1126) 221)

Transfection
Protein kinase C; Cationic liposome; Liposome (Farhood, H. (1111) 239)

Antibody-polylysine conjugate; Cationic liposome; DNA delivery; Endothelial cell (Trubetskoy, V.S. (1131) 311)

Cell surface; Gene expression; Homeobox; *Hox-3.3*; Aqueous two-phase system; (Mouse) (Shimeld, S.M. (1136) 253)

Transfer protein, nonspecific lipid
Phosphatidylserine decarboxylation; Pyrene-labeled phospholipid; Liposome; Phospholipid transfer; Nonspecific lipid transfer protein; Mitochondrion; (Rat liver); (Ehrlich ascites tumor) (Jasińska, R. (1105) 207)

Transferrin
Iron transport; Desferrioxamine; Ferric ammonium citrate; Melanotransferrin; Melanoma cell; (Human) (Richardson, D.R. (1103) 275)

Doxorubicin; *N*-Hydroxysuccinimide ester; Self-association; Albumin; Immunoglobulin (Demant, E.J.F. (1118) 83)

Lactoferrin; Mammary gland; (Porcine) (Lydon, J.P. (1132) 97)

Transgenic mice; Total iron binding capacity; Albumin; Serum amyloid protein; C3; Aging; Acute phase reaction (Adrian, G.S. (1132) 168)

Iron-chelate; T cell proliferation; Intracellular iron distribution; Ferritin synthesis; (Mouse lymphocyte) (Djeha, A. (1133) 147)

Iron uptake; Reticulocyte; Reticulocyte maturation; (Rabbit) (Qian, Z.M. (1135) 35)

Iron transport; K562 cell; Ferritin (Vyoral, D. (1137) 148)

Transferrin-adriamycin conjugate
Plasma membrane; NADH oxidase; Electron transport; Adriamycin-transferrin conjugate; Antitumor drug; (HeLa cell) (Sun, I.L. (1105) 84)

Transferrin binding
Intestinal iron absorption; Development; Ontogeny; (Guinea pig) (Chowrimootoo, G. (1116) 256)

Transferrin receptor
Iron; Ferritin; Cell differentiation; Macrophage (Iturralde, M. (1133) 241)

Cytoplasmic tail; Monoclonal antibody; Endocytosis (White, S. (1136) 28)

Transformant
Endothelin; Expression; Endothelium; Serum-free; (Human endothelial cell line) (Kondo, M. (1134) 242)

Transformation
p53; *ras*; Collagen; Tumor suppressor (Eizenberg, O. (1129) 34)

Translational control; Gene fusion; Thermal hysteresis (Rancourt, D.E. (1129) 188)

Transformed cell
Phospholipase D; Fibroblast (Huang, C. (1127) 242)

Transforming growth factor
Surfactant protein; (Human cell line) (Whitsett, J.A. (1123) 257)

Transforming growth factor α
Preputial gland; Tissue distribution; DNA sequence; (Mouse bladder) (Vaughan, T.J. (1132) 322)

Transforming growth factor β1
Gene transfer; Tumorigenesis; Angiogenesis; (Chinese hamster ovary cell line) (Ueki, N. (1137) 189)

Transgenic mice
Total iron binding capacity; Transferrin; Albumin; Serum amyloid protein; C3; Aging; Acute phase reaction (Adrian, G.S. (1132) 168)

Transglutaminase
$\varepsilon(\gamma$-Glutamyl)lysine crosslink; Skin wound; Connective tissue (Bowness, J.M. (1116) 324)

5-(Biotinamido)pentylamine; Fructose-1,6-bisphosphate aldolase; (HT29 colon cancer cell) (Lee, K.N. (1136) 12)

Monocyte chemotactic factor; Complement component; Coagulation factor XIII; Blood coagulation (Okamoto, M. (1138) 53)

Transhydrogenase
Photosynthetic bacterium; Chromatophore; Nicotinamide nucleotide; Protonmotive force; Energy coupling; (*Rb. capsulatus*) (Palmer, T. (1098) 21)

Binding site; NAD(H); NADP(H); Photoaffinity labeling; Mitochondrion; Proton pump (Hu, P.-S. (1102) 19)

Transhydrogenase, H^+-
Mitochondrion; Enzyme characterization; Soluble factor (Cunningham, I.J. (1100) 332)

Chromatophore membrane; Photosynthesis; (*Rhs. rubrum*) (Cunningham, I.J. (1101) 345)

Transient
Potassium ion; Chloride; Electrical transient; (Toad bladder) (Gordon, L.G.M. (1108) 8)

Transient dichroism
Cytoskeleton; Triplet probe (Wyatt, K. (1103) 327)

Transient EPR signal
Photosystem II; EPR; Spin-lattice relaxation; P680; Tyrosine-D; Manganese cluster (Kodera, Y. (1101) 23)

Transient expression
DNA transfection; Heat shock; (Cultured mammalian cell) (Takai, T. (1129) 161)

Transient response
Acid secretion dynamics; Index of conservation; Mathematical model; Partially conservative agent; Saturable kinetics (Ličko, V. (1137) 19)

Transition
Myoglobin; Dynamics; Kinetics; Oxygen escape reaction (Sato, F. (1122) 299)

Translation
Mitochondrion; Mitochondrial disease; mtDNA; Ribosome; rRNA (Schon, E.A. (1101) 206)

Pancreas; Polysome; Cholecystokinin (Perkins, P.S. (1136) 265)

Translation efficiency
mRNA; Globin; Base pair; Untranslated region (Francès, V. (1130) 29)

Translational control
Transformation; Gene fusion; Thermal hysteresis (Rancourt, D.E. (1129) 188)

Translational regulation
Ornithine decarboxylase; Induction; Amino acid; Transcriptional regulation; (Rat intestine) (Miyamoto, K.-i. (1129) 195)

Translocation
Ferritin; Polysome; Endoplasmic reticulum; (Rat liver) (Tacchini, L. (1131) 133)

Translocation, envelope
Colicin A; Channel activity; Membrane protein; Toxin (Letellier, L. (1101) 218)

Transmembrane pH gradient
Hepatic cholic acid; Cholic acid transport; pH regulation; Potassium ion regulation; Electrogenic transport (Veith, C.M. (1103) 51)

Ionophore A23187; Iron; Barium; Liposome; LUV; pH gradient; Cryo-electron microscopy; Electron microscopy (Chakrabarti, A.C. (1108) 233)

Transmembrane potential generator
Colloid gold particle; Heterocoagulation; Inhibitory analysis; Kinetic characteristic; (Bacterial cell) (Ulberg, Z.R. (1134) 89)

Transmembrane protein
Activin receptor; Serine/threonine kinase; Evolutionary conservation; cDNA library (Matzuk, M.M. (1130) 105)

Transmembrane protein topography
ATPase, H^+-; Proteoliposome; (*N. crassa*) (Rao, U.S. (1108) 153)

Transphosphatidylation
Phospholipid; PAF-acether; Phospholipase D; Primary cyclic alcohol; (*S.* sp.) (Testet-Lamant, V. (1123) 347)

Phospholipase D; Phosphatidic acid; Myocardium; Reperfusion injury; (Rat) (Moraru, I.I. (1139) 148)

Transport
Charge density; Proton pump; Membrane (Sitaramam, V. (1098) 336)

Solubilization; Reconstitution; Leucine; (*L. lactis*) (In 't Veld, G. (1104) 250)

Aspartate/glutamate carrier; Reconstitution; Liposome; Mitochondrion; (Bovine heart) (Bisaccia, F. (1106) 291)

Brush border membrane; Gradient; Imino acid; Amino acid; (Rabbit jejunum); (Rabbit ileum) (Munck, L.K. (1116) 83)

Caco-2; Amino acid; Phenylalanine; Uptake; Efflux (Hu, M. (1135) 233)

Transport kinetics
Periplasmic binding protein; Transport mechanism; Membrane carrier; Asymmetric carrier; Bacterial transport; Transport model (Krupka, R.M. (1110) 1)

Periplasmic binding protein; Transport mechanism; Membrane carrier; Asymmetric carrier; Bacterial transport; Transport model (Krupka, R.M. (1110) 11)

Membrane vesicle; Placenta (Eleno, N. (1111) 139)

Transport mechanism
Transport kinetics; Periplasmic binding protein; Membrane carrier; Asymmetric carrier; Bacterial transport; Transport model (Krupka, R.M. (1110) 1)

Transport kinetics; Periplasmic binding protein; Membrane carrier; Asymmetric carrier; Bacterial transport; Transport model (Krupka, R.M. (1110) 11)

Transport model
Transport kinetics; Periplasmic binding protein; Transport mechanism; Membrane carrier; Asymmetric carrier; Bacterial transport (Krupka, R.M. (1110) 1)

Transport kinetics; Periplasmic binding protein; Transport mechanism; Membrane carrier; Asymmetric carrier; Bacterial transport (Krupka, R.M. (1110) 11)

Transport regulation
Blood brain barrier; Capillary; Phosphate transport; Regulation (Dallaire, L. (1110) 59)

Transsulfuration pathway
Testosterone; Ornithine decarboxylase induction; Renal hypertrophy; *S*-Adenosylmethionine; *S*-Adenosylhomocysteine; Cellular methylation; *S*-Adenosylmethionine synthetase (Manteuffel-Cymborowska, M. (1116) 166)

Transverse tubular membrane
ATPase, Ca^{2+}-; ATPase, Na^+/K^+-; ATPase, H^+/K^+-; Sarcoplasmic reticulum; Monoclonal antibody; Anti-peptide antibody (Molnar, E. (1103) 281)

TR146 cell line
Calgranulin A; Calgranulin B; Cystic fibrosis antigen; Sputum; Granulocyte; (Cystic fibrosis); (Chronic obstructive pulmonary disease); (Chronic myeloid leukemia) (Longbottom, D. (1120) 215)

Trehalose
Cryoprotectant; Liposome; Glycophospholipid (Park, Y.S. (1124) 241)

TRH
Sodium ion–proton exchange; pH, intracellular (Törnquist, K. (1110) 165)

TRH-related peptide
Pyroglutamylglutamylprolineamide; Sexual maturation; (Rabbit prostate) (Thetford (née Mayes), C.R. (1115) 252)

Triacylglycerol
Lipid microsphere; Heme; Oxygen transporter; Hemoglobin model; Blood substitute (Tsuchida, E. (1108) 253)

Carnitine palmitoyl transferase; ($n-3$) Polyunsaturated fatty acid; Phosphatidate phosphohydrolase; Peroxisome (Surette, M.E. (1126) 199)

Lipid metabolism; Cholesterol; Hepatocyte; (Rat liver) (Haughom, B. (1128) 65)

Diabetes; Chylomicron; VLDL; Lipase; (Rat) (Mamo, J.C.L. (1128) 132)

Membrane lipid composition; Lipid synthesis; Membrane fluidity; Homeostasis, Ca^{2+}-; Phosphatidylcholine (Kerler, F. (1139) 57)

Triacylglycerol absorption
Tea catechin; Cholesterol absorption; Bile salt micelle; Thoracic duct lymph; (Rat) (Ikeda, I. (1127) 141)

Triacylglycerol emulsion
Lipoprotein lipase; Heparin (Hultin, M. (1125) 97)

Triacylglycerol metabolism
Lipid emulsion; Cholesteryl ester metabolism; Phosphatidylcholine metabolism; (Rat) (Redgrave, T.G. (1126) 65)

Triacylglycerol synthesis
Phospholipid; Diacylglycerol; (Rat liver) (Ide, T. (1124) 163)

Brefeldin A; Cholesterol esterification; Cholesteryl ester hydrolysis; ACAT inhibitor; Forskolin (Stein, O. (1125) 28)

Tribrid fusion protein
Anti-E1 sera (Wilson, V.G. (1129) 215)

Trichocyst
Exocytosis; Membrane; Secretion; (*Paramecium*) (Glas-Albrecht, R. (1103) 1)

Tricyclohexaprenol
Molecular evolution; NMR, ^2H-; Lipid membrane; Octaprenediol; Isoarborinol (Krajewski-Bertrand, M.-A. (1105) 213)

Triethylene glycol
Osmoelastic coupling; Interdigitated gel phase; Phosphatidylcholine; Diethylene glycol; Thermotropic phase transition (Yamazaki, M. (1109) 43)

Triggered release
Plasmalogen; Zinc phthalocyanine; Liposome; Drug delivery (Anderson, V.C. (1109) 33)

1,3,4-Trihydroxybutyl-1-phosphonate
(*sn*)-Glycerol-3-phosphate acyltransferase; (*S*)-3,4-Dihydroxybutyl-1-phosphonate; (*S*)-3-Hydroxy-4-oxobutyl-1-phosphonate; 4-Hydroxy-3-oxobutyl-1-phosphonate (Stein, T.A. (1123) 249)

Triiodothyronine
Hypothyroid; Hyperthyroid; Hepatocyte; Respiratory capacity; Thyroid hormone (Gregory, R.B. (1098) 61)

Hepatic triacylglycerol lipase; HepG2 cell (Nozaki, S. (1127) 298)

Thyroid hormone analog; Membrane transport of thyroid hormone (Lakshmanan, M. (1133) 213)

Triiodothyronine-binding site
Thyroid hormone; Tryptophan; Amino acid transport; Erythrocyte membrane (Samson, M. (1108) 91)

Trimethylamine *N*-oxide
Molybdopterin; Iron-sulfur protein; Electron transport; Anaerobic electron transport; Membrane protein (Weiner, J.H. (1102) 1)

ε-*N*-Trimethyllysine
Batten disease; Protein methylation; Storage disease; Lysosome (Katz, M.L. (1138) 97)

Trimethylphosphine
Electron transfer; Myoglobin (Brunel, C. (1101) 73)

Triose phosphate isomerase
Erythrocyte; Aldolase; D-Glucose metabolism (Maggetto, C. (1121) 31)

Triplet probe
Cytoskeleton; Transient dichroism (Wyatt, K. (1103) 327)

T7 RNA polymerase
Photoaffinity labeling; 8-AzidoATP; Active-site mapping (Knoll, D.A. (1121) 252)

Tropomyosin
Smooth muscle; Thermal stability (Graceffa, P. (1120) 205)

Calponin; Caldesmon; Paracrystal; Electron microscopy; Binding site (Childs, T.J. (1121) 41)

cDNA; Skeletal muscle; Smooth muscle (Hardy, S. (1131) 239)

Troponin C
Extrinsic fluorescence; (Rabbit skeletal) (Wang, C.-K. (1121) 16)

Truncated insulin chain
Insulin; Insulin chain; FTIR study (Wei, J. (1120) 69)

Trypanolysis
HDL_3; Nitrosylated HDL_3; Bovine HDL; Lipoprotein; (*T. b. brucei*) (Gillett, M.P.T. (1123) 239)

Trypsin
Erythrocyte membrane; Erythrocyte ghost; Resealing; Leakage; Skeletal protein; Phloretin; Carbodiimide (Klonk, S. (1106) 137)

Erythrocyte membrane; Inside-out vesicle; Leakage; Permeability; Diamide; Phloretin (Klonk, S. (1106) 143)

Glucose-6-phosphate dehydrogenase; Unfolding; Guanidine hydrochloride; Thermal denaturation; NADP (Bautista, J.M. (1122) 99)

Trypsin digestion
Oxygen evolution; Photosystem II; Histidine oxidation; Thermoluminescence (Ono, T.-a. (1099) 185)

Trypsin inhibitor
Enzyme purification; Amino acid sequence (Matsuo, M. (1120) 187)

Tryptamine
Brush-border membrane; Membrane potential; Membrane transport (Sugawara, M. (1111) 145)

Tryptic digestion
ATPase, H^+-; Hydrophobic labeling; TID, [^{125}I]-; Cyanogen bromide digestion; Membrane topology; Yeast (Seto-Young, D. (1102) 213)

Tryptic peptide
Protein characterization; Ribonuclease inhibitor; HPLC (Crevel-Thieffry, I. (1122) 107)

Tryptophan
Thyroid hormone; Triiodothyronine-binding site; Amino acid transport; Erythrocyte membrane (Samson, M. (1108) 91)

Sea anemone; Cytolysin; Chemical modification (Turk, T. (1119) 1)

Tryptophan fluorescence
Calcium binding protein; Near-infrared vibronic sideband spectroscopy; Vibrational spectroscopy; Ytterbium; Parvalbumin (Mattioli, T.A. (1101) 121)

Tryptophan oxygenase gene
Nucleotide sequence; Glucocorticoid receptor; Specific binding (Merkulov, V.M. (1132) 100)

Tryptophan triplet state
Alcohol dehydrogenase; Aldolase; Parvalbumin; Cytochrome *c* reduction; Phosphorescence (Dadak, V. (1100) 33)

Tryptophan tryptophylquinone
Hydrazine; Methylamine dehydrogenase; Quinoprotein; Enzyme inactivation (Davidson, V.L. (1121) 104)

L-Tryptophan 2,3-dioxygenase
Infrared spectroscopy; Steady-state kinetics; Hemoprotein; Inhibitor binding (Uchida, K. (1121) 153)

Tubule
Lipid; Diacetylene; Ethanol; Calorimetry (Rudolph, A.S. (1127) 186)

Tubulin
Porphyrin; Microtubule; Photochemical inhibition; Photochemotherapy (Berg, K. (1135) 147)

Tumor associated carbohydrate antigen
Glycosphingolipid; Pancreatic cancer; Blood group antigen; Neolacto-series carbohydrate chain (type 2) (Hattori, H. (1125) 21)

Tumor invasiveness
Local hyperacidity; B16F10 melanoma (Young, P.R. (1139) 163)

Tumor necrosis factor
Cytosolic phospholipase A_2; Glucocorticoid; Phospholipase A_2 (Goppelt-Struebe, M. (1127) 163)

Interleukin-1α; Hypocholesterolemia (Ettinger, W.H. (1128) 186)

Recombinant; Gene expression; COS-7; Carbohydrate; (Mouse) (Koyama, Y. (1132) 188)

Tumor promoter
Fibronectin; 12-*O*-tetradecanoylphorbol 13-acetate; Phorbol ester; Protein kinase C; Sphingosine; Calphostin C; (Fibroblast) (Scheidl, H. (1135) 295)

Tumor suppressor
p53; *ras*; Collagen; Transformation (Eizenberg, O. (1129) 34)

Tumorigenesis
Transforming growth-factor β1; Gene transfer; Angiogenesis; (Chinese hamster ovary cell line) (Ueki, N. (1137) 189)

Tumorigenicity
Biotin-containing enzyme; Hybrid cell; Pyruvate carboxylase (Bramwell, M.E. (1139) 115)

Two-dimensional electrophoresis
Aging; Senescence; Protein; SMP30; (Rat liver) (Fujita, T. (1116) 122)

Two-dimensional exchange NMR
NMR, ^{31}P-; One-dimensional exchange NMR; Lamellar phase; Hexagonal phase; Cubic phase; Phospholipid phase transition (Fenske, D.B. (1108) 201)

Two-dimensional gel electrophoresis
Ethanol; Gene expression; Neural cell (Miles, M.F. (1138) 268)

Two dimensional recognition pattern
Lipid anchored protein; Fab fragment; Membrane mimetics (Egger, M. (1104) 45)

Two-electron reduction
Respiratory chain; NADH:quinone reductase; Sodium pump; One-electron reduction; (*V. alginolyticus*) (Hayashi, M. (1099) 145)

TYMV RNA
RNA degradation; RNA deaggregation; Light scattering; Sucrose gradient centrifugation (Sam, T. (1129) 64)

Type C Niemann-Pick
Cholesterol; Sphingosine; Sphinganine; Sphinganine kinase (Goldin, E. (1127) 303)

Type III hyperlipoproteinemia
Apolipoprotein (apo) E1; Apo E gene; Restriction fragment length polymorphism (Moriyama, K. (1128) 58)

Type IX collagen
Chondroitin sulfate; Proteoglycan; Swarm rat chondrosarcoma (Arai, M. (1117) 60)

Tyramine cellobiose
Acidotropism; Lysosome; (Rat liver) (Zhong, Z.-D. (1106) 311)

Tyrosinase
Melanin; Estradiol; 2-Hydroxyestradiol; Estradiol-2,3-quinone; Dopa; Melanosome (Jacobsohn, G.M. (1116) 173)

4-Methylcatechol; *N*-Acetyldopamine; Sclerotization; (Insect cuticle); (Blowfly larvae) (Andersen, S.O. (1118) 134)

Tyrosinate fluorescence
Time-resolved fluorescence; Tyrosine fluorescence; S-100 protein (Turner, R.J. (1117) 265)

Tyrosine
Redox activity; Manganese ion oxidation; Polypeptide D1; Photosystem II (Diner, B.A. (1101) 134)

v-*fps*; Kinase; Hematopoiesis; Retrovirus; Interleukin-3 (Meckling-Gill, K.A. (1137) 65)

Tyrosine-D
Photosystem II; EPR; Transient EPR signal; Spin-lattice relaxation; P680; Manganese cluster (Kodera, Y. (1101) 23)

Tyrosine dephosphorylation
Protein phosphorylation; Tyrosine phosphorylation; Protein tyrosine phosphatase (Pot, D.A. (1136) 35)

Tyrosine fluorescence
Time-resolved fluorescence; Tyrosinate fluorescence; S-100 protein (Turner, R.J. (1117) 265)

Tyrosine kinase
Non-radioactive activity detection; Spermatozoon (Berruti, G. (1118) 149)

Epidermal growth factor receptor; Ammonium sulfate (Hubler, L. (1133) 307)

Protein phosphorylation; Phosphorylation; Kinase; Signal transduction (Glenney Jr., J.R. (1134) 113)

Fibroblast growth factor; FGF; Receptor tyrosine kinase; FGF receptor; Alternative splicing; Splicing (Jaye, M. (1135) 185)

Nerve growth factor; Epidermal growth factor; Neurite outgrowth; (Rat pheochromocytoma PC12 cell) (Muroya, K. (1135) 353)

CD4; PMA; Protein tyrosine kinase; Receptor internalization (Yoshida, H. (1137) 321)

Tyrosine phosphorylation
Sodium ion–proton exchange; Vasopressin; Genistein; Phorbol ester; Staurosporine; Protein kinase C; Blood platelet; (Human) (Aharonovits, O. (1112) 181)

Biliary-glycoprotein; Protein kinase C; Cell adhesion (Afar, D.E.H. (1134) 46)

Protein phosphorylation; Tyrosine dephosphorylation; Protein tyrosine phosphatase (Pot, D.A. (1136) 35)

Tyrosine protein kinase
Phosphorylation; Brush-border membrane; (Kidney) (Tremblay, L. (1108) 183)

Tyrphostin
Protein kinase; Chaperone; Galactosylsphingosine (psychosine); Monomethyl sphingosine; Dimethylsphingosine (Abdel-Ghany, M. (1137) 349)

U

U18666A
Cholesterol biosynthesis; Squalene synthase; HMG-CoA reductase; Peroxisome; (Human) (Cohen, L.H. (1126) 114)

Ubiquinol
Metal-catalyzed oxidation; Enzyme inactivation; Oxidation; Coenzyme Q_1 (Mordente, A. (1100) 235)

Ubiquinol-10
LDL; Lipid peroxidation; (Human) (Mohr, D. (1126) 247)

Ubiquinol : cytochrome c_2 oxidoreductase
Mitochondrion; Statistical model (Nieboer, P. (1101) 90)

Cytochrome *bc*-complex; Site-directed mutagenesis; (*Rb. sphaeroides*) (Crofts, A. (1101) 162)

Ubiquinone
Reaction center; Photosynthesis; Menaquinone; (*Rc. gelatinosus*) (Agalidis, I. (1098) 201)

Reaction center; Electron transfer; Isoprene tail; Menaquinone; (*Rb. sphaeroides*) (Schelvis, J.P.M. (1102) 229)

Cholesterol; Dolichol; Lymphocyte; Mevalonate (Henry, A. (1127) 168)

Ubiquitin
Cancer chemotherapy; Cisplatin; Aclarubicin; Drug resistance (Isoe, T. (1117) 131)

Proteasome; Multicatalytic proteinase; Macropain; Proteinase inhibitor (Chu-Ping, M. (1119) 303)

Ubiquitin-conjugating enzyme
(*S. cerevisiae*) (Vassal, A. (1132) 211)

UDP-[^{14}C]galactose
Chloroplast; Envelope; Thylakoid; Lipid asymmetry; Lipolytic treatment; Galactolipid synthesis (Rawyler, A. (1104) 331)

UDP-glucose
Membrane; Glucosyldiacylglycerol; Lipid; Regulation; (*A. laidlawii*) (Dahlqvist, A. (1105) 131)

UDP-glucuronosyltransferase
Development; Liver; (Rat) (Dannenberg, A.J. (1116) 250)

Azidothymidine; Enzyme inhibition; (Liver); (Human) (Herber, R. (1139) 20)

Ultracentrifuge
Spectrin; Dissociation; Sedimentation equilibrium; Self-association; Ionic strength (Cole, N. (1121) 23)

Ultrafast spectroscopy
Antenna; Chlorophyll; Light harvesting complex; Photosystem II; Plant photosynthesis; Pump-probe spectroscopy (Kwa, S.L.S. (1102) 202)

Ultrafiltration
Proteinuria; Glomerular basement membrane; Cross-linking; Fibre-matrix hypothesis; Pore theory; Glomerulonephritis; Dimethylmalonimidate; Glutaraldehyde (Walton, H.A. (1138) 173)

Ultramicroelectrode
Intracellular oxygen; Light irradiation; Protoplast; Alga; Oxygen (Matsue, T. (1101) 69)

Ultraviolet
Lipoprotein; HDL; Oxidized lipoprotein; Apolipoprotein A-I; Peroxidation; Cytotoxicity; (Lymphoblastoid cells) (Alomar, Y. (1128) 163)

Ultraviolet-B radiation
Photosystem II; Reaction center; Protein photolysis; Absorbance difference spectrophotometry; Immunoblot analysis; (Spinach thylakoids) (Melis, A. (1100) 312)

Ultraviolet difference absorption spectroscopy
Pancreatic phospholipase A_2; Competitive inhibition; 2-Acylaminophospholipid (Deveer, A.M.T.J. (1125) 73)

Ultraviolet irradiation
DNA polymerase; DNA repair synthesis; (Human fibroblast) (Popanda, O. (1129) 155)

Ultraweak light emission
Emission spectrum; Lipid peroxidation; Mitochondrion; Spinach (Hideg, È. (1098) 27)

Uncoupler
Pyrophosphatase; Mitochondrion; (*Saccharomyces*) (Lundin, M. (1098) 217)

Growth inhibition; Outer membrane; Membrane permeability; (*E. coli*) (Sedgwick, E.G. (1099) 45)

Fluazinam; Mitochondrion; Solution complexation mechanism (Brandt, U. (1101) 41)

Uncoupling protein
Brown adipose tissue; Phospholipid composition ; Mitochondrion; GDP binding; Energization parameter; Proton conductance (Goubern, M. (1107) 159)

Unfolding
Fibronectin; Heparin binding; DNA binding; Protein (Litvinovich, S.V. (1119) 57)

Glucose-6-phosphate dehydrogenase; Guanidine hydrochloride; Thermal denaturation; Trypsin; NADP (Bautista, J.M. (1122) 99)

Unidirectional flux
Palmitate; Membrane transport; Multiple-indicator dilution technique; Fatty acid metabolism; (Rat liver) (Ferraresi-Filho, O. (1103) 239)

Unidirectional orientation
Chloroplast; Reconstitution; Phosphate transport; Reaction mechanism (Flügge, U.-I. (1110) 112)

Unilamellar vesicle
Lipid peroxidation; Membrane; Unsaturated fatty acid; Liposome preparation; HPLC (Salgo, M.G. (1127) 131)

Unsaturated fatty acid
Glycosphingolipid; NMR, ^{2}H-; Lipid bilayer (Singh, D. (1107) 23)

Absorption enhancer; Intestinal absorption; Diamide; *N*-Ethylmaleimide; Oleic acid; Carboxyfluorescein; Passive transport (Murakami, M. (1117) 83)

Heparin; α-Fetoprotein; Protein conformation; Estrogen binding; Immunodetection; (Human) (Haourigui, M. (1125) 157)

Unilamellar vesicle; Lipid peroxidation; Membrane; Liposome preparation; HPLC (Salgo, M.G. (1127) 131)

***cis*-Unsaturated fatty acid**
Phospholipase A_2 inhibition; Enzyme–fatty acid interaction; Enzyme-inhibitor-substrate complex (Raghupathi, R. (1126) 206)

Unsaturated phospholipid acyl chain
Lipid–protein interaction; Leucine transport; Phospholipid; Membrane permeability; (*L. lactis*) (In 't Veld, G. (1108) 31)

Unstable hemoglobin
Hemoglobin; Anemia; Hemolysis; Deamidation; Oxygen affinity (Wajcman, H. (1138) 127)

Unstirred layer
Palmitate; Fatty acid transport; Erythrocyte ghost; Efflux kinetics (Bojesen, I.N. (1111) 185)

Unstirred water layer
Drug absorption; Permeability; Intestinal epithelium; Caco-2; Aqueous boundary layer (Karlsson, J. (1111) 204)

Untranslated region
Translation efficiency; mRNA; Globin; Base pair (Francès, V. (1130) 29)

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Aldolase; Polyadenylation signal; cDNA; (Mouse) (Maine, A.B. (1129) 240)

Multidrug resistance; Multigene family; pEXI/172; P-glycoprotein-like gene sequence (Deuchars, K.L. (1130) 157)

Upstream activation sequence
*GAL*10 promoter; Heterologous gene expression; Lysine-rich histone; Transcription; (*S. cerevisiae*) (Shwed, P.S. (1131) 152)

Upstream region
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Uptake
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Urea cycle enzyme
Gene expression; Liver development; (Mutant mouse) (Tomomura, M. (1139) 167)

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Reducing-equivalent transfer; Hypothyroid; Hyperthyroid; (Isolated rat hepatocyte) (Gregory, R.B. (1137) 34)

Uric acid
Allantoin; Separation procedure; Purine catabolism; Formate; (Rat liver) (Di Stefano, A. (1117) 1)

Xanthine oxidase; Xanthine; Superoxide; Free radical; Kinetics (Radi, R. (1122) 178)

Urine
Deoxyribonuclease; Multiplicity; Purification; Isoelectric focusing (Yasuda, T. (1119) 185)

Thromboxane; Prostacyclin; Prostaglandin E_2; Platelet; Vessel; Kidney; Aspirin; Immuno-affinity; Gas chromatography-mass spectrometry (Chiabrando, C. (1133) 247)

Urine acidification
Sodium ion/proton antiport system; Amiloride; Cell proliferation; Intracellular pH regulation; pH regulation; Sodium ion transport (Viniegra, S. (1106) 99)

Urokinase
HuH-7; Hepatoma cell-line; Plasminogen activator; Plasminogen activator inhibitor-1; Fibrinolytic system (Arndt, A. (1138) 149)

Urokinase receptor
Plasminogen activator; Fluorimetric assay; Acid elution (Baker, M.S. (1117) 143)

Ursolic acid
Lipoxygenase activity; Cell proliferation (Simon, A. (1125) 68)

Use-dependent depolarization
Lipid solubility; Local anesthetic; Pump conductance; Resting depolarization; (*Chara corallina*) (Nosaka, S. (1106) 325)

U6 snRNA
snRNA gene; RNA processing; Small nuclear RNA; (Potato) (Hu, Y. (1129) 90)

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Chloride transport; Yeast; Protonmotive force; pH (Wada, Y. (1101) 296)

Vacuolar ATPase
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Vacuolar membrane
Calcium ion channel; Plasma membrane; (*Arabidopsis*) (Ping, Z. (1112) 287)

Vacuolar membrane vesicle
Polyamine transport; Proton potential; (*S. cerevisiae*) (Kakinuma, Y. (1107) 126)

Vacuolar system
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Vacuolar type ATPase
Lung surfactant; Phosphoenzyme type ATPase; Lamellar body protein phosphorylation; (Rat) (Chander, A. (1123) 198)

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Anion transport; Ion channel; Lipid bilayer; Reconstitution; Tonoplast (Klughammer, B. (1104) 308)

ATPase; ATPase, H^+-; Liposome; Proton pump; Reconstitution; Tonoplast; (*Kalanchoë*) (Warren, M. (1106) 117)

Potassium ion; Cell size; Photodynamic treatment; Toluidine blue; Yeast; (*K. marxianus*) (Paardekooper, M. (1108) 86)

Valinomycin
Black lipid membrane; Tetraether lipid; Capacitance; Conductance; Gramicidin; Nonactin; Lipopolysaccharide; (*Th. acidophilum*) (Stern, J. (1128) 227)

Valproate
Dicarboxylic acid; Omega oxidation; Beta oxidation; Ketosis; Reye's syndrome; (Rat mitochondria); (Rat peroxisome) (Mortensen, P.B. (1124) 71)

Vanadate
ATPase, Na^+/K^+-; Phosphatidate phosphohydrolase; Phospholipid; Reconstitution (Swarts, H.G.P. (1107) 143)

Bile acid metabolism; Cholic acid; 3α,7α-Dihydroxy-5β-cholestane; Diabetes; (Rat) (Kimura, K. (1123) 303)

Vanadium
Prostaglandin; Chloride secretion; Intestinal electrolyte transport; Colon (Plass, H. (1107) 139)

Free radical; Lipid peroxidation; Microsome; Linoleic acid; (Human placenta) (Byczkowski, J.Z. (1125) 134)

Variant
Thyroxine-binding globulin; TBG-San Diego; Sequencing; Mutation; Deficiency; Polymorphism; (Thyroid) (Bertenshaw, R. (1139) 307)

Vascular smooth muscle
Control of respiration; NMR, ^{31}P-; Oxygen consumption (Hardin, C.D. (1133) 133)

ATP diphosphohydrolase; Platelet aggregation; Endothelium; Purine nucleotide (Côté, Y.P. (1139) 133)

Vascular smooth muscle cell
Magnesium; Calcium; Fura-2 (Zhang, A. (1134) 25)

Endothelial cell; Conditioned medium; Proteoglycan (Vijayagopal, P. (1135) 129)

Vasoconstrictor
Atherosclerosis; Endothelium; Endothelin; Hypertension; (Rabbit) (Marsden, P.A. (1129) 245)

Vasodilator drug
Dipyridamole; Fluorescence; Bovine serum albumin, interaction with; Micelle, interaction with (Tabak, M. (1116) 241)

Vasopressin
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Sodium ion–proton exchange; Genistein; Tyrosine phosphorylation; Phorbol ester; Staurosporine; Protein kinase C; Blood platelet; (Human) (Aharonovits, O. (1112) 181)

Phosphatidylinositol; Inositol trisphosphate; Myo-inositol; Bradykinin; Mesangial cell; (Kidney) (Greenberg, L. (1138) 229)

Vasorelaxation
Apigenin; Calcium influx; (*A. graveolens*); (Rat aorta) (Ko, F.-N. (1115) 69)

VDAC modulator
Channel; Membrane permeability; Mitochondrion; Respiration control; Membrane permeability (Liu, M.Y. (1098) 255)

Venom peptide
Circular dichroism; Quartz/liquid interface; Protein adsorption; Interface; Melittin (Smith, L.J. (1121) 111)

Verapamil
Sphingomyelin; Sphingomyelinase; ACAT; Brefeldin; Cholesterol transport; (Human skin fibroblast); ($CaCo_2$ cell); (Mouse macrophage); (Aortic smooth muscle cell) (Stein, O. (1126) 291)

Very-long-chain fatty acid
Acyl-CoA; Acyl-CoA elongase; (*L. annua*) (Fehling, E. (1126) 88)

Very long chain fatty acid (VLCFA)
Lipid; Acyl-CoA; Antibody; Elongating system; Icosanoyl-CoA synthase; (*Allium porrum*) (Bessoule, J.-J. (1117) 78)

Vesicle
Cation uptake; Fluorescent dye; Lipophilic cation; (*E. coli*) (Sedgwick, E.G. (1099) 51)

Synthetic amphiphile; Sendai virus; Membrane fusion (Fonteijn, T.A.A. (1110) 185)

Vesicle fusion
Lysozyme; Phosphatidylserine membrane; Fluorescence (Arnold, K. (1124) 88)

Vesicle morphology
Vesiculation; Amphiphile; Detergent; Erythrocyte (Hägerstrand, H. (1109) 117)

Vesiculation
Merocyanine 540; BHK cell (Allan, D. (1103) 179)

Vesicle morphology; Amphiphile; Detergent; Erythrocyte (Hägerstrand, H. (1109) 117)

Vessel
Thromboxane; Prostacyclin; Prostaglandin E_2; Urine; Platelet; Kidney; Aspirin; Immuno-affinity; Gas chromatography-mass spectrometry (Chiabrando, C. (1133) 247)

v-*fps*
Tyrosine; Kinase; Hematopoiesis; Retrovirus; Interleukin-3 (Meckling-Gill, K.A. (1137) 65)

Vibrational entropy
Hemoglobin; Heme binding; Temperature jump; Configurational entropy (Steinhoff, H.-J. (1121) 189)

Vibrational spectroscopy
Calcium binding protein; Near-infrared vibronic sideband spectroscopy; Ytterbium; Parvalbumin; Tryptophan fluorescence (Mattioli, T.A. (1101) 121)

Vicinal water
Gel filtration; Nonsolvent water; Sephadex; Bio-Gel (Van Steveninck, J. (1115) 96)

Vinblastine transport
P-glycoprotein; Glycoprotein; Colchicine transport; Plasma membrane; Multidrug resistance; Chemosensitizer; (CHO cell) (Doige, C.A. (1109) 161)

Vinyl substituent
Hydroxyethyl substituent; Allomerization; Pyro-bacteriochlorophyll; Hydroxy substituent; Water elimination; Enolization; Photosynthesis (Struck, A. (1101) 321)

Viral infection
Autoimmune antigen Ku; Signal transduction (Quinn, J.P. (1131) 181)

Viral protein
Membrane fusion; Resonance energy transfer; Synthetic peptide; Liposome; Fusion protein (Glushakova, S.E. (1110) 202)

Viral replication
HIV; Processive synthesis; Reverse transcriptase; Retrovirus; AIDS (DeStefano, J.J. (1131) 270)

Virus
HIV; AIDS; Cytolysis; Hemolysis; HIV glycoprotein 41 000 (gp41) (Mobley, P.W. (1139) 251)

Viscoelastic gel
Mucus; Small intestine; Colon; Mechanical spectroscopy; Mucin glycoprotein (Sellers, L.A. (1115) 174)

Viscosity
Ribonuclease T_1; Fluorescence quenching; Acrylamide; Gating mechanism (Somogyi, B. (1119) 81)

Visual transduction
Retina; Rhodopsin; Transducin (Chabre, M. (1101) 260)

Vitamin B-12
Cobalamin; Aquacobalamin reductase; NADPH-cytochrome *c* (*P*-450) reductase; (Rat liver microsome) (Watanabe, F. (1119) 175)

Vitamin C
Superoxide; Vitamin E; Liposome; Chemiluminescence (Gotoh, N. (1115) 201)

Vitamin D
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Vitamin D receptor
Calcium; Vitamin D; Leukemia; Promyelocyte (Goto, H. (1132) 103)

Vitamin E
Superoxide; Vitamin C; Liposome; Chemiluminescence (Gotoh, N. (1115) 201)

Psoralen; Photooxidation; Singlet oxygen (Costantini, C. (1116) 291)

Icosapentaenoic acid; Lipid peroxidation; Lipoxygenase activity; Glutathione; (Human platelet) (Calzada, C. (1127) 147)

Vitamin K-1
Photosystem I; EPR; Electron spin polarization; Phylloquinone; A_1 acceptor (Rustandi, R.R. (1101) 311)

Vitellogenin
Receptor; Endocytosis; Lysine and arginine residue; (Oocyte) (Roehrkasten, A. (1133) 160)

Vitronectin
Species specificity; Cell spreading; Deglycosylation; Ferguson plot (Nakashima, N. (1120) 1)

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VLDL
Particle size; HDL; Cholesteryl ester transfer protein; Lipoprotein lipase; (Human) (Newnham, H.H. (1125) 297)

Diabetes; Chylomicron; Triacylglycerol; Lipase; (Rat) (Mamo, J.C.L. (1128) 132)

β-VLDL
Hypercholesterolemia; Bile acid; Lipoprotein uptaken; (Hepatocyte (ExHC rat)) (Imaizumi, K. (1123) 101)

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Sodium ion channel; Skeletal muscle; Bistramide A (Sauviat, M.-P. (1103) 109)

Inactivation kinetics; Sulfhydryl reagent (Alekseev, S.I. (1110) 178)

Voltage dependence
Calcium ion-activated potassium ion channel; Potassium ion channel; Single-channel patch clamp; Patch clamp; Calcium ion dependence; Erythrocyte; (Human) (Leinders, T. (1112) 67)

Ion channel; Porin; Mitochondrial outer membrane; Lipid bilayer; Mitochondrion; (*P. sativum*) (Schmid, A. (1112) 174)

Voltage-gated
Chloride channel; Electroplax; Ion transport; (*Torpedo californica*) (O'Neill, G.P. (1129) 131)

Voltage sensitivity
Sodium–calcium ion exchanger; Calcium ion channel; Intracytosolic calcium ion; Calcium ion, intracytosolic; Aging; Cerebrocortical nerve ending (Canzoniero, L.M.T. (1107) 175)

Volume regulation
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Sodium/potassium/chloride cotransport; Actin; Microfilament; Cytochalasin B; (Ehrlich ascites tumor cell) (Jessen, F. (1110) 199)

Osmotic cell swelling; Chloride ($^{36}Cl^-$) efflux; Chloride current; Whole-cell patch clamp; Patch clamp; (Human keratinocyte) (Rugolo, M. (1112) 39)

Von Willebrand factor
RGD; Fibrinogen; Integrin; GPIIIa-derived peptide; Platelet receptor (Cook, J.J. (1119) 312)

DNA sequence; Primary adhesion domain; (Bovine) (Bakhshi, M.R. (1132) 325)

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Warfarin
Plasmalemma redox system; Dicumarol; Plasma membrane; Electron transport; (*Z. mays* L.) (Döring, O. (1110) 235)

Water activity
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Organic solvent; Lipase activity; Thermodynamics (Valivety, R.H. (1122) 143)

Water channel
Cytochrome-*c* oxidase; Energy transduction (Kornblatt, J.A. (1099) 182)

Water content
Solid protein; Deuterium; NMR (Tamura, A. (1119) 178)

Water diffusion
Oil diffusion; Sorption-desorption experiments; NMR; Rape seed (*Brassica napus* L.) (Fleischer, G. (1116) 305)

Water elimination
Vinyl substituent; Hydroxyethyl substituent; Allomerization; Pyrobacteriochlorophyll; Hydroxy substituent; Enolization; Photosynthesis (Struck, A. (1101) 321)

Water filled channel
phoE ion channel; Aqueous phase; Ionic channel (Gutman, M. (1109) 141)

Water oxidation
Photosynthesis; Charge separation; Salt effect; (*Synechococcus*) (Pauly, S. (1099) 203)

Photosynthesis; Photosystem II; Lauroylcholine chloride; Peroxide formation (Ananyev, G. (1100) 303)

Photosystem II; Electron transfer; Photosynthesis (Debus, R.J. (1102) 269)

Water transport
ATPase, H^+-; Sodium ion–proton exchange; Proteinase; Mercurial; Enzyme inhibition; Sodium ion/proton antiport; (Rat) (Sabolić, I. (1103) 137)

Weaning
Intestine; Fucosyl-transferase; Hydrocortisone; (RU 38486) (Biol, M.-C. (1133) 206)

Werner's syndrome
Hyaluronate; Skin fibroblast (Nakamura, T. (1139) 84)

Wheat aleurone
S-Adenosylmethionine synthetase; Regulation of AdoMet synthetase; Gibberellic acid; Enzyme synthesis, de novo; Enzyme subunit, in vitro hybridization of (Mathur, M. (1137) 338)

Whole-cell clamp
Dorsal root ganglion; Anionic channel; Phospholipase A_2; Snake venom; (*Oxyuranus scutellatus scutellatus*) (Possani, L.D. (1134) 210)

Whole-cell patch clamp
Osmotic cell swelling; Chloride ($^{36}Cl^-$) efflux; Chloride current; Patch clamp; Volume regulation; (Human keratinocyte) (Rugolo, M. (1112) 39)

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XANES
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XANES spectroscopy
Porphyrin; Heme structure (Cartier, C. (1119) 169)

Xanthine
Xanthine oxidase; Uric acid; Superoxide; Free radical; Kinetics (Radi, R. (1122) 178)

Xanthine dehydrogenase
Enzyme purification; Molybdoenzyme; Substrate inactivation; (Chlamydomonas) (Pérez-Vicente, R. (1117) 159)

Xanthine oxidase
Amiloride; Hydrogen peroxide; Sodium ion channel (Bauer, M.L. (1104) 87)

5′-Nucleotidase; Adenosine deaminase; Adenosine kinase; AMP deaminase; Nucleoside phosphorylase; (Rat Kidney) (Pawelczyk, T. (1116) 309)

Milk; Enzyme characterization; Enzyme purification; (*Human*) (Abadeh, S. (1117) 25)

Uric acid; Xanthine; Superoxide; Free radical; Kinetics (Radi, R. (1122) 178)

Xanthophyll
Carotenoid; Phospholipid peroxidation; Antioxidant activity; Peroxyl radical trapping (Lim, B.P. (1126) 178)

Xenobiotic metabolism
Drug metabolism; Cytochrome *P*-450; Hormone regulation; Sexual differentiation; Growth hormone (Henderson, C.J. (1118) 99)

X-linked recessive ichthyosis
Cholesterol sulfate; Orientational order; Bilayer stability; (Stratum corneum) (Kitson, N. (1111) 127)

X-ray absorption spectroscopy
DNA structure; Hydrogen bonding (Kirtley, S.M. (1132) 249)

X-ray crystallography
Polarization microscopy; L2 phase; GC-MS; *t*-Butyldimethylsilyl ether; Phospholipase C (Norberg, P. (1112) 52)

X-ray crystal structure
Familial amyloidosis; Met-30 transthyretin variant; β-Sheet protein (Hamilton, J.A. (1139) 9)

X-ray diffraction
(−)-Δ^8-Tetrahydrocannabinol; (−)-*O*-Methyl-Δ^8-tetrahydrocannabinol; Dipalmitoylphosphatidylcholine; Drug–membrane interaction; DSC; Solid state NMR; NMR, ^2H- (Yang, D.-P. (1103) 25)

Galactolipid; Monogalactosyldiacylglycerol; DSC; Lipid phase behavior; Freeze-fracture (Sanderson, P.W. (1107) 77)

Lipid–drug interaction; Calorimetry; Pindolol; Model membrane; Swelling (Colotto, A. (1107) 165)

Stealth liposome; Polymer grafting; Lipid bilayer; Poly(ethylene glycol); Steric stabilization; Membrane mechanical properties (Needham, D. (1108) 40)

Dipalmitoylphosphatidylglycerol; Poly(L-lysine); DSC; Freeze-fracture; Phase transition; Subgel phase (Takahashi, H. (1110) 29)

Collagen; Aging; Diabetes (Naresh, M.D. (1122) 161)

Phase diagram; Differential scanning; Calorimetry (Dorset, D.L. (1127) 293)

Diacetylene; Lipid bilayer; Permeability; Polymerizable lipid; Ether lipid; Bilayer structure (Rhodes, D.G. (1128) 93)

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